182 Orchard Hill Drive
Cloverdale, Virginia 24077
P: 540.966.8655 F: 540.966.8656

Read Mountain
MIDDLE SCHOOL

Parent/Guardian:

We appreciate your patience as we navigate uncharted territory. This packet is to keep your child engaged in educational activities during the closure.

Please encourage your child to work through the packet to the best of their ability. There is no need to return the packet to the school once it is completed. Students should keep the packet and bring it back to school when school reopens. All students are encouraged to complete activities in Reading Plus if they have internet availability. Reading Plus is an adaptive literacy intervention program that develops the fluency, comprehension, and motivation students need to be successful readers. Students were given a letter with their Reading Plus log-in information on Friday.

Students:
We will miss seeing you every day! This packet is to help keep your mind sharp during the closure. Please work through this packet to the best of your ability. **Make sure you complete the assignments for your <u>current classes</u>.** (You should only complete the activities assigned to your level of English and math, science OR social studies and your current exploratory course.) Your teachers will be available to help you. Please use Google Classroom, Hangout Chat, or email to connect with your teacher should you need assistance. A list of teacher emails are on the back of this letter. Directions for using Google Hangout Chat are on page three. Teachers will be available online each day, Monday – Friday from 8:15 a.m. – 3:15 p.m.

reading plus

Remember that Reading Plus is a valuable resource for you to improve your reading skills. Log-on and complete your activities if you have the ability to do online work! Remember you received a letter Friday with your log-in information. Your English teachers are available if you need your log-in information or assistance as well!

STAY HEALTHY READ MOUNTAIN! WASH YOUR HANDS!	TRY A SCHEDULE TO MAKE SURE YOU ARE MAXIMIZING YOUR TIME. IT WILL ALSO GIVE YOU SOME BALANCE AND VARIETY IN YOUR DAY!

CLEAN HANDS ARE SAFER HANDS
FOLLOW THESE 4 STEPS TO MAKE SURE YOUR HANDS ARE SAFE.

20 SEC

WET	LATHER & SCRUB	RINSE	DRY
Use warm or cold running water.	Get the backs of your hands, between fingers and under nails. (Scrub long enough to hum "Happy Birthday" twice)	Use clean water, warm or cold.	Use a clean towel or air dry.

*Information taken from the CDC. https://www.cdc.gov/handwashing/when-how-handwashing.html

COVID-19 Daily Schedule
for kids

Time	Activity	
Before 9am	Wake Up	Wake up, eat breakfast, make bed, get ready for the day
9-10am	Free Time	Watch TV, iPad, Play Games, ect
10-11am	Outside Time	Take a walk, play in the yard or walk dog
11-12am	Creative Time	Art projects, Slime, Coloring, ect
12-12:30pm	Lunch	
12:30-1pm	Chores	Do appropriate chores
1-2pm	Quiet Time	Read, Puzzle, Nap, or color
2-4pm	Academic time	Educational Games, Math, Online education, Science Project, Writing
4-5pm	Outside or Play Time	Go outside to ride bikes or play in the house
5-6pm	Dinner	
6-9pm	Free time until bed	

TEACHER EMAILS

Teacher Name	Email	Teacher Name	Email
Mr. Anderson	swanderson@bcps.k12.va.us	Mrs. Mast	bmast@bcps.k12.va.us
Mr. Bolster	pbolster@bcps.k12.va.us	Mrs. Maust	hmaust@bcps.k12.va.us
Mrs. Bostic	mbostic@bcps.k12.va.us	Mrs. Milko	smilko@bcps.k12.va.us
Mrs. Bruce	sbruce@bcps.k12.va.us	Mrs. Moretz	cmoretz@bcps.k12.va.us
Mrs. Buchanan	kbuchanan@bcps.k12.va.us	Mrs. Myers	amyers@bcps.k12.va.us
Mr. Burton	cburton@bcps.k12.va.us	Mrs. Perrine	kperrine@bcps.k12.va.us
Mrs. Callahan	dhcallahan@bcps.k12.va.us	Mrs. Poats	cpoats@bcps.k12.va.us
Ms. Camper	agcamper@bcps.k12.va.us	Mrs. Poff	cpoff@bcps.k12.va.us
Mrs. Cross	bcross@bcps.k12.va.us	Mrs. Pyne	kpyne@bcps.k12.va.us
Mrs. Cundiff	acundiff@bcps.k12.va.us	Mr. Roberts	troberts@bcps.k12.va.us
Mrs. Duncan	jduncan@bcps.k12.va.us	Mrs. Rogers	brogers@bcps.k12.va.us
Mrs. Durham	bdurham@bcps.k12.va.us	Mrs. Rondeau	srondeau@bcps.k12.va.us
Ms. Evans	tevans@bcps.k12.va.us	Mrs. Sabin	csabin@bcps.k12.va.us
Ms. Fives	pfives@bcps.k12.va.us	Mrs. Savinda	lsavinda@bcps.k12.va.us
Mrs. Fletcher-Cox	dfcox@bcps.k12.va.us	Mrs. Schaeffer	hschaeffer@bcps.k12.va.us
Mr. Flippen	bflippen@bcps.k12.va.us	Mr. Shephard	cshephard@bcps.k12.va.us
Mrs. Glass	lglass@bcps.k12.va.us	Mrs. Simmons	hsimmons@bcps.k12.va.us
Mrs. Graham	hgraham@bcps.k12.va.us	Mr. Spencer	kspencer@bcps.k12.va.us
Mrs. Halsey	khalsey@bcps.k12.va.us	Mrs. Stevens	astevens@bcps.k12.va.us
Mrs. Hatfield	chatfield@bcps.k12.va.us	Mrs. Underwood	sunderwood@bcps.k12.va.us
Dr. Hawks	chawks@bcps.k12.va.us	Mrs. Vincent	jvincent@bcps.k12.va.us
Mrs. Hodnett	khodnett@bcps.k12.va.us	Mrs. Venable	mvenable@bcps.k12.va.us
Mrs. Hufton	shufton@bcps.k12.va.us	Mrs. T. White (Math)	twhite@bcps.k12.va.us
Ms. Janney	ljanney@bcps.k12.va.us	Mrs. V. White (SS)	vwhite@bcps.k12.va.us
Ms. Jones	ssjones@bcps.k12.va.us	Mr. Wiegandt	swiegandt@bcps.k12.va.us
Mr. Lang	tlang@bcps.k12.va.us	Mr. Woodard (Eng)	ewoodard@bcps.k12.va.us
Mr. Lawson	jlawson@bcps.k12.va.us	Mrs. Woodard (Civics)	hwoodard@bcps.k12.va.us
Mrs. Linkenhoker	blinkenhoker@bcps.k12.va.us	Mrs. Yamatani	myamatani@bcps.k12.va.us
Mrs. Malcolm	rmalcolm@bcps.k12.va.us	Mrs. Yates	jyates@bcps.k12.va.us
Mrs. Mandeville	jmandeville@bcps.k12.va.us	Mrs. Young	hyoung@bcps.k12.va.us

Slide 1:

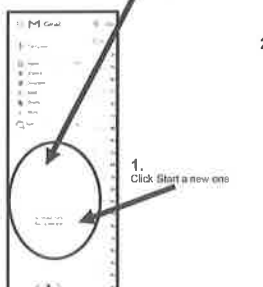# Google Chat From Your 1770 Email Account

Slide 3 starts as if the user has never had a Google Hangout Chat.
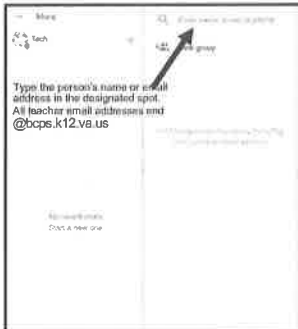
Slide 2:

If you have already used Chat, to start a new chat, click plus next to your name, and begin to type the person's name or email.

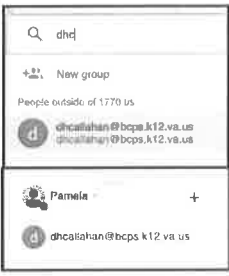All teachers have the following ending to their email: _@bcps.k12.va.us

Slide 3:

IF you have never had a google hangouts chat, your window will look like this: Empty

1. Click Start a new one

2. Type the person's name or email address in the designated spot. All teacher email addresses end @bcps.k12.va.us

Slide 4:

3.
- When you start typing, the teacher's name may pop up.
- If not continue typing until the complete address is in the box.
- Then press Enter on the keyboard.
- The person's name will now show in your chat list

dhc

New group

People outside of 1770 us

dhcallahan@bcps.k12.va.us
dhcallahan@bcps.k12.va.us

Pamela +

dhcallahan@bcps.k12.va.us

4.
For people you have not used hangouts with before you must invite them.

Start a conversation with dhcallahan@bcps.k12.va.us!

Let's chat on Hangouts!

Slide 5:
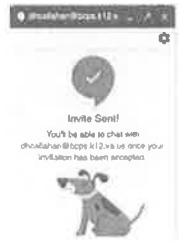
Your first "Conversation with a teacher will give you these boxes to complete."

Once the invite is sent, you must wait for a response. This is only for people you have never chatted with in Hangouts.

Start a conversation with dhcallahan@bcps.k12.va.us!

Mrs. Callahan, I am using you as a

5.
Start your "conversation" or pose your question.

Click "Send Invite"

Invite Sent!

You'll be able to chat with dhcallahan@bcps.k12.va.us once your invitation has been accepted.

Slide 6:

Pam +

Teresa Simmons
You: I'm with the teacher... It's ...

Once you have set up a conversation, you just have to click on the person's name.
The Chat window will appear in the bottom right of your screen.

You can start a conversation or respond by using the "Send a Message" box. Press "Enter" on the keyboard to send the message.

Choose your assignments based on your class assignment below.

Advanced English 8

Mandeville 1A
Graham 1A, 1B, 4A, & 4B

1. Choose a fiction or nonfiction selection to read each day. If you are currently reading a novel, you may continue using the novel you are reading. Non-fiction articles can be online or print sources.
2. Each day choose **one** activity from either the "Nonfiction Activity" or "Novel Study Choice" board.
3. You may keep the activities you complete in a Google Doc, journal, or on loose leaf paper (just remember to keep your work).
4. If you have any questions, please reach out to Mrs. Mandeville (jmandeville@bcps.k12.va.us), Mrs. Graham (hgraham@bcps.k12.va.us) by email or Google Classroom.

English 8

Graham 3
Yates 1,3
Cross 3,4

1. Choose a fiction or nonfiction selection to read each day. If you are currently reading a novel, you may continue using the novel you are reading. Non-fiction articles can be online or print sources.
2. Each day choose **one** activity from either the "Nonfiction Activity" or "Novel Study Choice" board.
3. You may keep the activities you complete in a Google Doc, journal, or on loose leaf paper (just remember to keep your work).
4. If you have any questions, please reach out to Mrs. Graham (hgraham@bcps.k12.va.us), Mrs. Yates (jyates@bcps.k12.va.us) or Mrs. Cross (bcross@bcps.k12.va.us) by email or Google Classroom.

Don't forget that Reading Plus is available. Directions for utilizing Reading Plus are as follows:

1. The website for Reading Plus readingplus.com.
2. The site code is rpreadm1.
3. Your username is first initial, last initial, last 2 digits of your lunch number.
4. Your password id first initial, last initial, entire lunch number.

If you are a literacy strategies student, please see your assignment on the back.

Literacy Strategies

Directions: *Read for 15 minutes each day. You may read to a parent, guardian, grandparent, or sibling. Record your reading using the chart below.*

Date	Title

Novel Study Choice Board

Advanced English

	Verbal-Linguistic	Visual-Spatial	Logical-Mathematical	Naturalist
Knowledge	Record at least 5 vocabulary words that you found interesting. Note why you chose those words.	Draw a diagram of something that was described in the book and label the parts.	Sequence events from the text on a timeline.	List parts of the text that appeal to each of the five senses.
Comprehension	Write a summary of the book or chapter that you read.	Summarize events from the text by creating a comic strip.	Use a flow chart to explain several key events from the text.	Suggest a solution to a problem from the text.
Application	Create a conversation between two characters from your book.	Research a person or event from the text and make a storyboard to explain what you found.	Demonstrate understanding of the information from the text in a way that makes sense to you.	Demonstrate how nature played a role in events from the text.
Analysis	Compare two characters from the text.	Use a graphic organizer to compare characters or events from the text.	Explain how the text represents information that all students should know.	Choose a character and imagine he had to pack a suitcase for a trip. What would you find in it and why?
Evaluation	Justify the actions of a character in the book.	Develop a visual presentation to justify the actions of a character.	Critique the motives of the characters in the text.	Rate the actions of a person or people from the text. Explain why you rated each one this way.
Synthesis	Write a letter to the author of the book that describes your opinion of the book or a specific part of the book.	Create a chart with symbols that represent a person from the text. Give the meaning of each symbol.	Consider how the author's life may have influenced how he wrote the text.	Make a hypothesis about what may have changed if a character were in a different setting in the book.

Nonfiction Tic-Tac Toe Choice Board

Summarize tonight's reading Include what is most important about the topic. **Generate your own question** about the topic.	**What is the central idea** of the reading? What does the author want you to understand?	**From the reading, pick out two sentences** that the author uses. **Combine them into one.**
Choose one new vocabulary word that you don't know. Based on context clues, what do you think the word means? Which words give you a clue to the meaning?	Complete your independent reading each night. Choose two after-reading tasks to make a tic-tac-toe by going through this center box.	**Write a complete paragraph about your reading selection's main idea and supporting details. Use a variety of sentence types (simple, compound, complex, and compound-complex).**
What is one of the features of this nonfiction text that helps you learn the information? How is it useful?	**Make a personal connection** to something you just read.	**Describe the problem and/or the solution** discussed in your text.

Novel Study Choice Board

English 8

Write a poem about two main events in the story.	Draw a picture of the main character; and then write ten words that describe the main character.	Compare one of the main settings of the story to the setting where you live.	Design a comic strip that shows the sequence of events in the story.
Pick five vocabulary words you found interesting. Use them in a different sentence.	Pick 5 events. Write cause and effect statements for those events.	Make connections to the story, including a connection to your life, to another book you have read, and to the real world.	Pick a scene that is described in detail in the story. Draw a detailed picture and then write your own description of what is happening.
Write at least 4 predictions about what you think will happen later in the story (or after the end). Why do you think these things will happen?	Create a graphic organizer comparing and contrasting two characters in the story.	Draw a picture that illustrates the main setting in the story. Write two sentences that describe the settings.	Write a test/quiz for the book. Include 10 questions. Create an answer key.
Write an interview for a main character of the book. Ask at least 5 questions and write the answers to the questions, as the character would respond.	Compare two settings from the text.	Suggest a solution to a problem from the text.	Choose a character and imagine you walked into his room. What would you find in his room, and why?

English 8

10 Nonfiction Activity Ideas for Kids

1. Create a comic strip version of the book or informational text
2. Make an illustrated glossary of terms.
3. Act out one or more important parts.
4. Make a game board of significant events or information in the text.
5. Write a list of things you learned then make a quiz to share.
6. Write an imaginary (or real) interview with the author.
7. Draw and label a step-by-step process.
8. Create a poster/collage that summarizes the book.
9. Take a survey of your family's knowledge about the the topic then graph it.
10. Write how the info will affect your life.

Math 8

The following pages will help you to review the SOL's that we have already covered in math class this year. A suggestion would be to complete 1 page per day. Feel free to use your math notebook to help you if you have a question. You may also email your math teacher if needed.

Mrs. Hodnett   khodnett@bcps.k12.va.us
Mrs. Savinda   lsavinda@bcps.k12.va.us
Mr. Bolster   pbolster@bcps.k12.va.us

Math 8 Strategies
(currently enrolled students only)

We suggest that students enrolled in math strategies utilize IXL.com via their strategy account.

User ID:
first initial, middle initial, last name, last two digits of lunch number @ botetourtcounty

Password: first initial, last initial, lunch number

Please go under your grade level and look for starred skills.
If you have any questions, please contact your teacher through email.

SELECTED RESPONSE

Select the correct answer.

1. Evaluate $2x + \dfrac{x}{5} - 3x$ for $x = 10$.

   Ⓐ 20
   Ⓑ 22
   Ⓒ 52
   Ⓓ −8

2. Evaluate $2x(x-y)+(y-x)$ for $x = 3$ and $y = 2$.

   Ⓐ 5
   Ⓑ −3
   Ⓒ 6
   Ⓓ 0

3. Evaluate $(y-2)(x-1)$ for $x = -1$ and $y = 1$.

   Ⓐ 1
   Ⓑ 0
   Ⓒ −1
   Ⓓ 2

4. Evaluate $(y-2)(x-1)$ for $x = 1$ and $y = -1$.

   Ⓐ 1
   Ⓑ 0
   Ⓒ −1
   Ⓓ 2

5. Evaluate $4x^y$ for $x = 2$ and $y = 3$.

   Ⓐ 32
   Ⓑ 36
   Ⓒ 24
   Ⓓ 512

6. Evaluate $-\sqrt{x^2 - 4yz}$ for $x = 6$, $y = \dfrac{1}{2}$, and $z = 10$.

   Ⓐ 4
   Ⓑ −4
   Ⓒ $2\sqrt{22}$
   Ⓓ $-2\sqrt{22}$

7. Simplify $a(a+a)+a(a-a)$.

   Ⓐ $4a$
   Ⓑ $4a^2 + 2a$
   Ⓒ $2a^2$
   Ⓓ $3a^2 - 2a$

8. Simplify $(h-7)(5)(h+7)(-2)$.

   Ⓐ $10h^2 - 490$
   Ⓑ $10h^2 + 490$
   Ⓒ $-10h^2 - 490$
   Ⓓ $-10h^2 + 490$

Select all correct answers.

9. Which values of x make the expression $-x^2 + 8$ evaluate to 0?

   Ⓐ 4   Ⓓ −4
   Ⓑ $2\sqrt{2}$ Ⓔ $-2\sqrt{2}$
   Ⓒ 8   Ⓕ none of the above

10. Which values of q make the expression $\dfrac{1}{3}(q-9)^2 - 3$ evaluate to 0?

   Ⓐ 6   Ⓓ 3
   Ⓑ 12   Ⓔ 0
   Ⓒ 9   Ⓕ none of the above

8.9a and 8.9b

Math 8

SELECTED RESPONSE
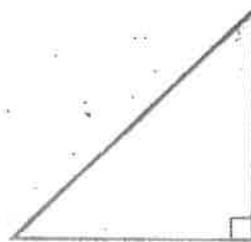Select the correct answer.

1. Find the length of the missing side.

(A) 23

(B) 45.2

(C) 65
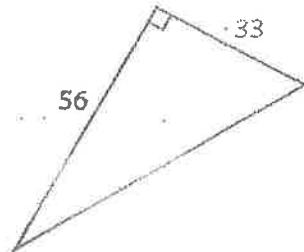
(D) 89

2. Find the length of the missing side.

49 in.

168 in.

(A) 25 in.

(B) 217 in.

(C) 175 in.
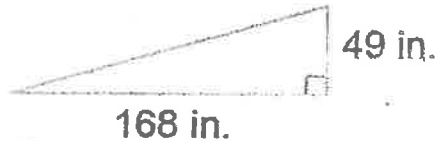
(D) $\sqrt{217}$ in.

3. Find the length of the legs of this isosceles right triangle if each leg is the same length and the hypotenuse is $\sqrt{50}$.

(A) 5

(B) $\dfrac{\sqrt{50}}{2}$

(C) $\sqrt{5} \cdot \sqrt{2}$

(D) $5\sqrt{2}$

4. Which set of three numbers can be used to make a right triangle?

(A) 39, 41, 45

(B) 39, 49, 59

(C) 39, 69, 99

(D) 39, 80, 89

5. Why is it not possible to make a triangle using lengths of 10 ft, 60 ft, and 65 ft?

(A) because $10 + 60$ is greater than 65

(B) because $10^2 + 60^2$ does not equal 65^2

(C) because $65 - 60$ does not equal 10

(D) because $(10 + 60)^2$ does not equal 65^2

Select all correct answers.

6. Which of these sets of side lengths can form a right triangle?

(A) 20 mm, 35 mm, 40 mm

(B) 15 ft, 36 ft, 39 ft

(C) 25 m, 14 m, 20 m

(D) 2 cm, 2 cm, 4 cm

(E) 18 km, 15 km, 11 km
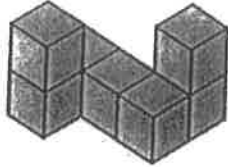
(F) 2 in., 2.5 in., 1.5 in.

CONSTRUCTED RESPONSE

7. Find the length of the missing side. Round to the nearest tenth.

22 in.

7 in.

_____

_____
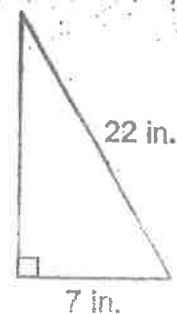
SELECTED RESPONSE
Select the correct answer.
Use the diagram for 1–3.

1. How many cubes would be visible from the top view of the figure?
   - (A) 6 cubes
   - (B) 5 cubes
   - (C) 4 cubes
   - (D) 3 cubes

2. How many cubes would be visible from the front view of the figure?
   - (A) 6 cubes
   - (B) 5 cubes
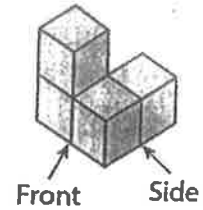   - (C) 4 cubes
   - (D) 3 cubes

3. How many cubes would be visible from the side view of the figure?
   - (A) 6 cubes
   - (B) 5 cubes
   - (C) 4 cubes
   - (D) 3 cubes

4. If you were to physically construct a model of this figure, how many cubes would you need?

   - (A) 6 cubes
   - (B) 5 cubes
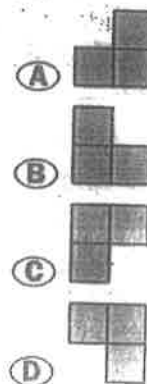   - (C) 4 cubes
   - (D) 3 cubes

Use the diagram for 5–7.

Front   Side

5. Which of these is the top view of the figure?
   - (A)
   - (B)
   - (C)
   - (D)
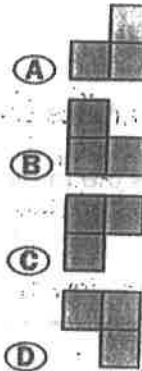
6. Which of these is the side view of the figure?
   - (A)
   - (B)
   - (C)
   - (D)
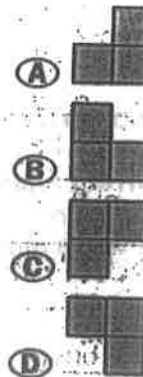
7. Which of these is the front view of the figure?
   - (A)
   - (B)
   - (C)
   - (D)

SELECTED RESPONSE
Select the correct answer.

1. Find x.

22°
41°
9x

Ⓐ x = 3°   Ⓒ x = 13°
Ⓑ x = 10°·   Ⓓ x = 19°

2. What is the measure of ∠DFE ?

B
A   70°   C
F
E   D
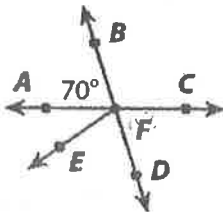
Ⓐ 70°
Ⓑ 110°
Ⓒ 20°
Ⓓ cannot be determined

Select all correct answers.

3. Which of these statements is true?

B   •C
40°
D
F
A
E
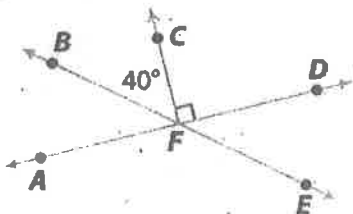
Ⓐ ∠EFD and ∠BFC are vertical angles.
Ⓑ m∠EFD = 50°
Ⓒ ∠CFB and ∠EFD are complementary.
Ⓓ ∠CFB is adjacent to ∠AFE.

4. If m∠1 = m∠5, which pairs of angles are supplementary?
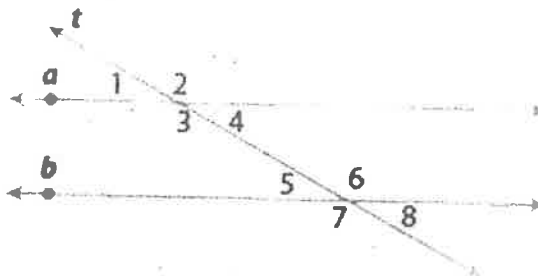
t
a   1   2
3   4
b
5   6
7   8

Ⓐ angles 1 and 8
Ⓑ angles 1 and 7
Ⓒ angles 2 and 4
Ⓓ angles 2 and 3
Ⓔ angles 3 and 7
Ⓕ none of the above

5. Which pairs of angles are complementary?

A
F
B
E   35°
G
C
D
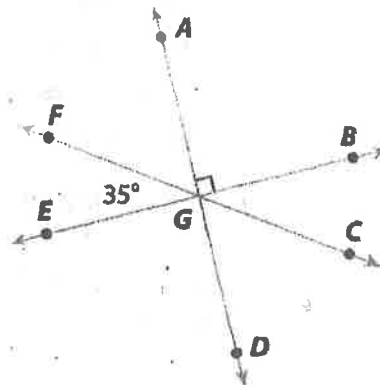
Ⓐ ∠AGF and ∠EGF
Ⓑ ∠AGB and ∠EGD
Ⓒ ∠AGF and ∠BGC
Ⓓ ∠EGF and ∠EGC

CONSTRUCTED RESPONSE

6. Can an angle be supplementary with itself? Explain.

_____

_____

_____

SELECTED RESPONSE
Select the correct answer.

1. A theater ticket's price is marked down by 30% on the last day. The original price was $40. What is the sale price?

   Ⓐ $12

   Ⓑ $28

   Ⓒ $52

   Ⓓ $7

2. A widget is bought by a retail store for $4 and sold for $9. What is the markup?

   Ⓐ 5% markup

   Ⓑ 500% markup

   Ⓒ 125% markup

   Ⓓ 225% markup

3. A credit card charges 8% simple interest on the outstanding balance at the end of each month. How much interest is charged on a balance of $350 after one month?

   Ⓐ $378.00

   Ⓑ $358.00

   Ⓒ $322.00

   Ⓓ $28.00

4. A credit card charges 9% simple interest on the outstanding balance at the end of each month. What is the total amount owed on a balance of $300 after one month of interest?

   Ⓐ $27.00

   Ⓑ $327.00

   Ⓒ $273.00

   Ⓓ $309.00

5. A credit card charges 12% simple interest on outstanding balance at the end of each month. How much interest is charged on a balance of $430 after one month?

   Ⓐ $481.60

   Ⓑ $5.16

   Ⓒ $442.00

   Ⓓ $51.60

6. Membership in the chess club last year was 32 students. This year's membership is 18 students. This represents a:

   Ⓐ 77.78% increase

   Ⓑ 56.25% decrease

   Ⓒ 43.75% decrease

   Ⓓ 14% decrease

7. An elephant weighed 300 pounds at birth and 1500 pounds at the age of 2 years. What was the percent increase in the elephant's weight?

   Ⓐ 500%   Ⓒ 400%

   Ⓑ 1200%   Ⓓ 1100%

Select all correct answers.

8. The number of bears in a park increases over the years from 55 to 88. Which of the following statements is true?

   Ⓐ The bear population increased by 60%.

   Ⓑ The bear population increased by 160%.

   Ⓒ The bear population decreased by 60%.

   Ⓓ The bear population decreased by 62.5%.

   Ⓔ The bear population increased by more than 100%.

   Ⓕ The bear population increased by less than 100%.

8.3a and 8.3b

Math 8

SELECTED RESPONSE
Select the correct answer.

1. Between which pair of consecutive integers does $-\sqrt{13}$ fall on a number line?
   - (A) between −3 and −4
   - (B) between 3 and 4
   - (C) between −13 and −14
   - (D) between −12 and −13

2. Between which pair of consecutive integers does $\sqrt{215}$ fall on a number line?
   - (A) between −14 and −15
   - (B) between −14 and −16
   - (C) between 14 and 16
   - (D) between 14 and 15

3. Which of these is the best estimate for a solution of $x^2 = 172$?
   - (A) $x = 11$
   - (C) $x = 13$
   - (B) $x = 12$
   - (D) $x = 14$

4. Which of these is a solution of $x^2 = 36$?
   - (A) $x = \pm 4$
   - (C) $x = \pm 8$
   - (B) $x = \pm 6$
   - (D) $x = \pm 9$

Select all correct answers.

5. Which of these is a solution of $x^2 = \dfrac{1}{81}$?
   - (A) $x = \pm\dfrac{1}{9}$
   - (B) $x = \pm\dfrac{1}{3}$
   - (C) $x = \pm 9$
   - (D) $x = \pm 3$

6. Which of these is a possible solution of $x^2 = 256$?
   - (A) $x = -16$
   - (B) $x = 16$
   - (C) $x = 0$
   - (D) $x = 22$
   - (E) $x = -22$
   - (F) none of the above

7. Which of these is a possible solution of $x^2 = -256$?
   - (A) $x = -16$
   - (B) $x = 16$
   - (C) $x = 0$
   - (D) $x = 22$
   - (E) $x = -22$
   - (F) none of the above

8. What are the possible integer solutions to the equation $x^2 = 289$?
   - (A) $x = 17$
   - (D) $x = 1$
   - (B) $x = -17$
   - (E) $x = 289$
   - (C) $x = 0$
   - (F) $x = -289$

9. Which of the following numbers fall between 15 and 20 on a number line?
   - (A) $\sqrt{220}$
   - (D) $\sqrt{231}$
   - (B) $\sqrt{17}$
   - (E) $\sqrt{375}$
   - (C) $\sqrt{256}$
   - (F) $\sqrt{410}$

10. Which of the following numbers fall between 0 and 1 on a number line?
    - (A) $\sqrt{2}$
    - (D) $\sqrt{\dfrac{89}{93}}$
    - (B) $-\sqrt{2}$
    - (E) $1 - \sqrt{\dfrac{89}{93}}$
    - (C) $\sqrt{\dfrac{1}{4}}$
    - (F) $1 + \sqrt{\dfrac{89}{93}}$

Name _____ Date _____ Class _____

8.2

Math 8

SELECTED RESPONSE
Select the correct answer.

1. Anya is thinking of a real number. Is she thinking of a rational number?

   Ⓐ yes

   Ⓑ no

   Ⓒ can't be determined

2. Syrio is thinking of an irrational number. Is he thinking of a real number?

   Ⓐ yes

   Ⓑ no

   Ⓒ can't be determined

Select all correct answers.

3. Which names apply to the number −13.999 ?

   Ⓐ integer   Ⓓ irrational

   Ⓑ whole   Ⓔ real

   Ⓒ rational   Ⓕ natural

4. Which names apply to the number $-\dfrac{\sqrt{49}}{7}$?

   Ⓐ integer   Ⓓ irrational

   Ⓑ whole   Ⓔ real

   Ⓒ rational   Ⓕ none of these

5. Which names apply to the number $-\dfrac{\sqrt{50}}{7}$?

   Ⓐ integer

   Ⓑ whole

   Ⓒ rational

   Ⓓ irrational

   Ⓔ real

   Ⓕ none of these

6. Which names apply to the number $\sqrt{\sqrt{81}}$?

   Ⓐ integer   Ⓓ irrational

   Ⓑ whole   Ⓔ real

   Ⓒ rational   Ⓕ natural

7. Which names apply to the number $\sqrt{\pi^2}$?

   Ⓐ integer   Ⓓ irrational

   Ⓑ whole   Ⓔ real

   Ⓒ rational   Ⓕ none of these

SELECTED RESPONSE
Select the correct answer.

1. Between which pair of decimals does $\sqrt{13}$ fall on a number line?

   (A) between 3.2 and 3.3

   (B) between 3.4 and 3.5

   (C) between 3.6 and 3.7

   (D) between 3.8 and 3.9

2. The number e is an irrational number approximately equal to 2.718. Between which pair of square roots does e fall?

   (A) $\sqrt{2}$ and $\sqrt{3}$ (C) $\sqrt{7}$ and $\sqrt{8}$

   (B) $\sqrt{5}$ and $\sqrt{6}$ (D) $\sqrt{10}$ and $\sqrt{11}$

3. To the nearest hundredth, what is the value of $\left(\sqrt{2}\right)^3$?

   (A) 2.80   (C) 2.82

   (B) 2.81   (D) 2.83

4. Which of this set of numbers comes first when they are placed in descending order?

1900%	$\sqrt{400}$	$\sqrt{225}$	$\dfrac{29.5}{2}$	2.1×10^1

   (A) 2.1×10^1 (C) $\sqrt{400}$

   (B) 1900%   (D) $\sqrt{225}$

5. Which of the set of numbers from problem 4 is in the middle when they are placed in descending order?

   (A) 2.1×10^1

   (B) 1900%

   (C) $\sqrt{400}$

   (D) $\dfrac{29.5}{2}$

6. Which of this set of numbers is in the middle when they are placed in order?

$-\sqrt{0}$	3%	$\dfrac{\pi}{3}$	-0.3	$\dfrac{\sqrt{5}}{2}$

   (A) $-\sqrt{0}$ (C) 3%

   (B) -0.3 (D) $\dfrac{\pi}{3}$

Select all correct answers.

7. Which of the following numbers fall between 4.7 and 4.8 on a number line?

   (A) $\sqrt{22}$ (D) $1+\sqrt{15}$

   (B) 1.5π (E) $2\sqrt{6}$

   (C) $\dfrac{\sqrt{91}}{2}$ (F) $5-\pi$

8. Suppose each irrational number below is approximated by the whole number to which it is closest. Which of the irrational numbers have whole number approximations that are even?

   (A) $2\sqrt{32}$ (D) $\sqrt{52}-3$

   (B) $5+\sqrt{18}$ (E) $3\sqrt{14}$

   (C) $\sqrt{24}$ (F) $\sqrt{20}+\sqrt{26}$

Select the correct answer for each lettered part.

9. Determine whether each number is greater than $\sqrt{10}$.

   a. $\sqrt{3}+\sqrt{6}$ ○ Yes ○ No

   b. $2\sqrt{3}$ ○ Yes ○ No

   c. $\dfrac{\sqrt{22}}{2}$ ○ Yes ○ No

   d. $\sqrt{14}-\sqrt{3}$ ○ Yes ○ No

   e. $\sqrt{\sqrt{10}}$ ○ Yes ○ No

Geometry / STEM

Maust/Malcolm

3rd Block

Geometry Review Packets

Packet 1 (Geometry Basics, Angle & Line Relationships)

- Apply the distance formula to find the length of a line segment.
- Apply the midpoint formula to find the coordinates of the midpoint of a segment.
- Solve problems by using angle relationships (vertical, complementary, supplementary, linear pair).
- Solve problems using the relationships between angles formed by the intersection of two parallel lines and a transversal, including: corresponding angles, alternate interior angles, alternate exterior angles, and consecutive interior angles.
- Use algebraic and coordinate methods to prove whether two lines are parallel.
- Apply the slope formula to find the slope of a line.
- Compare the slopes to determine whether two lines are parallel, perpendicular or neither.

Packet 2 (Logic)

- Use a counterexample to prove a false statement.
- Determine the validity of a compound statement (both conjunctions and disjunctions).
- Given a conditional statement, identify the inverse, converse, and contrapositive.
- Determine the validity of a bi-conditional statement.
- Recognize and use all symbols of formal logic ($\sim$, $\wedge$, $\vee$, $\rightarrow$, $\leftrightarrow$, and $\therefore$) and translate verbal arguments into symbolic form.
- Use the Law of Detachment and the Law of Syllogism to give valid conclusions.
- Use Venn diagrams to represent relationships, such as the intersection and union.
- Interpret Venn diagrams.

Packet 3 (Relationships in Triangles & Congruent Triangles)

- Solve problems using the Triangle Sum Theorem, angles in isosceles triangles, and exterior angles of triangles.
- Determine whether a triangle could be formed given the lengths of the sides.
- Given the length of two sides of a triangle, determine the range in which the length of the third side must lie.
- Order the sides of a triangle by their lengths when given the measures of the angles.
- Order the angles of a triangle by their measures when given the lengths of the sides.
- Solve real-world problems given information about the lengths of the sides and/or measures of angles in triangles.
- Find side and angle measures in congruent triangles using algebraic methods.
- Determine whether two triangles are congruent using definitions, postulates, and theorems.
- Use coordinate methods, such as the distance formula and slope formula, to determine if two triangles are congruent.

Packet 4 (Similar Triangles & Trigonometry)

- Find side and angle measures in similar triangles using algebraic methods.
- Determine whether two triangles are similar using definitions, postulates, and theorems.
- Use coordinate methods, such as the distance formula and slope formula, to determine if two triangles are similar.
- Use the Pythagorean Theorem to solve problems in right triangles, including real-world situations.
- Use the Pythagorean Theorem Converse to prove whether a right triangle can be formed given three side lengths.
- Solve for missing side lengths in 45-45-90 and 30-60-90 triangles.
- Solve problems in triangles using sine, cosine, and tangent ratios.
- Solve real-world problems, using right triangle trigonometry and properties of right triangles.

Name: _____	Geometry Review: Packet #1

Topic #1: Distance & Midpoint

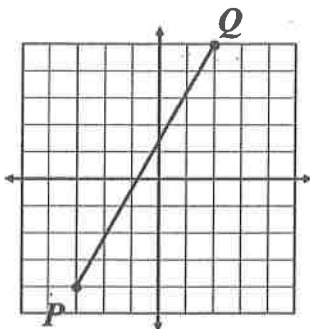| Distance Formula:	Midpoint Formula:

For questions 1-2, find the distance and midpoint of the segments given the endpoints.

1. $\overline{AB}$ with $A(3, 4)$ and $B(-1, 10)$

$AB =$ _____

Midpoint = _____

2.
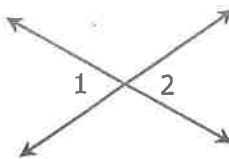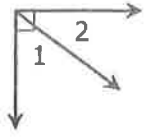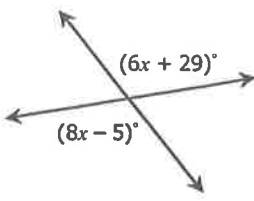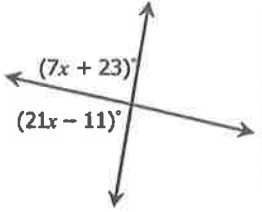
$PQ =$ _____

Midpoint = _____

3. $\overline{JK}$ has endpoints $J(-1, 10)$ and $K(-5, 2)$. $\overline{MN}$ has endponts $M(9, -7)$ and $N(1, -3)$. Is $\overline{JK} \cong \overline{MN}$?

4. If Y is the midpoint of $\overline{XZ}$, Y is located at $(3, -1)$, and Z is located at $(11, -5)$, find the coordinates of X.

5. If D is the midpoint of $\overline{CE}$, $CD = 9x - 7$, and $DE = 3x + 17$, find CE.

Topic #2: Angle Relationships

Classify the relationship between angles 1 and 2.			
	$m\angle 1 = 68°; \ m\angle 2 = 112°$		

6. Find the value of x.

$(6x + 29)°$

$(8x - 5)°$

7. Find the value of x.

$(7x + 23)°$

$(21x - 11)°$

8. If $\angle A$ and $\angle B$ are complementary angles, $m\angle A = (2x + 11)°$ and $m\angle B = (10x - 17)°$, find $m\angle A$.

9. If $\angle N$ and $\angle P$ are supplementary angles, $m\angle N = (x + 3)°$ and $m\angle P = (7x - 15)°$, find $m\angle P$.
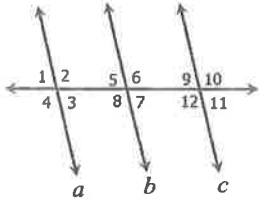
Topic #3: Parallel Lines & Transversals

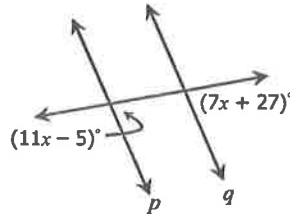**10.** Use the diagram below to classify each pair of angles.
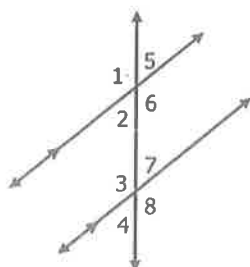
a. $\angle 1$ and $\angle 3$ _____

b. $\angle 5$ and $\angle 4$ _____

c. $\angle 6$ and $\angle 7$ _____

d. $\angle 3$ and $\angle 6$ _____

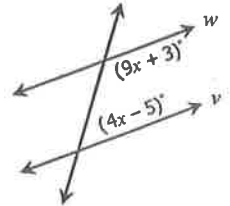**11.** If $a \parallel b \parallel c$ and $m\angle 9 = 76°$, find the measure of each missing angle.

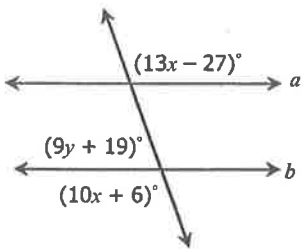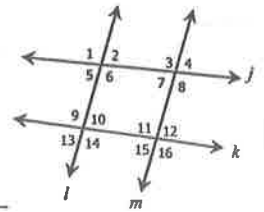| a. $m\angle 1 =$	e. $m\angle 5 =$	i. $m\angle 10 =$
b. $m\angle 2 =$	f. $m\angle 6 =$	j. $m\angle 11 =$
c. $m\angle 3 =$	g. $m\angle 7 =$	k. $m\angle 12 =$
d. $m\angle 4 =$	h. $m\angle 8 =$	

12. If $p \parallel q$, solve for x.

$(7x + 27)°$

$(11x - 5)°$

13. Find x so that $w \parallel v$.

$(9x + 3)°$

$(4x - 5)°$

14. If $a \parallel b$, solve for x for y.

$(13x - 27)°$

$(9y + 19)°$

$(10x + 6)°$

15. Use the diagram to the right to answer the questions below.

a. If $m\angle 3 = 107°$, what must be $m\angle 16$ in order for $j \parallel k$? _____

b. If $m\angle 15 = 84°$, what must be $m\angle 14$ in order for $l \parallel m$? _____

c. If $m\angle 3 = m\angle 6$, what converse proves $l \parallel m$? _____

d. If $m\angle 7 = m\angle 15$, what converse proves $j \parallel k$? _____

e. If $m\angle 5 + m\angle 9 = 180°$, what converse proves $j \parallel k$? _____

f. If $m\angle 12 = m\angle 13$, what converse proves $l \parallel m$? _____

Topic #4: Parallel & Perpendicular Lines in the Coordinate Plane

Be able to find slope from a....

- **Graph** (Use rise/run). Don't forget zero slope and undefined slope!

- **Ordered Pairs** using the **Slope Formula**: _____

- **Equations** given in Slope-Intercept Form _____ and Standard Form _____

Describe the slope of parallel lines.	Describe the slope of perpendicular lines.

For questions 16-17, give the slopes of the lines that are parallel and perpendicular to the line on the graph.

16.
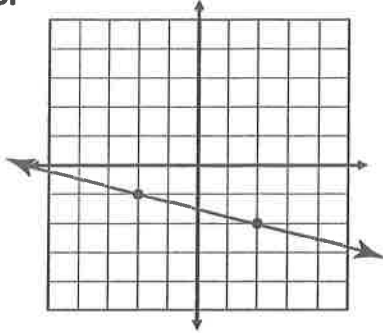
Parallel Slope:

Perpendicular Slope:

17.
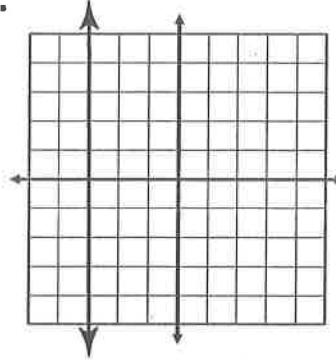
Parallel Slope:

Perpendicular Slope:

For questions 18-20, determine if $\overline{AB}$ and $\overline{CD}$ are parallel, perpendicular, or neither.

18. $A(-4, 3)$, $B(2, -12)$, $C(10, 5)$ and $D(0, 1)$

19. $A(2, 3)$, $B(8, -15)$, $C(-2, 2)$ and $D(-5, 11)$

20. $A(5, 6)$, $B(-1, 6)$, $C(-2, -7)$ and $D(-2, -4)$

For questions 21-24, determine if the equations are parallel, perpendicular, or neither.

21. $y = x + 6$ and $x - y = 2$

22. $x - 2y = 8$ and $y = -2x + 1$

23. $4x + 3y = 9$ and $3x + 4y = 36$

24. $y = 5$ and $y = -2$

Topic #1: Counterexample

A counterexample is an example that proves a statement false. Determine if the statements are true or false. If false, provide a counterexample.

1. All multiples of 4 are also multiples of 8. _____

2. The base angles of an isosceles triangle are always congruent. _____

3. The product of two perfect squares is always a perfect square. _____

4. Supplementary angles always comprised of one obtuse and one acute angle. _____

_____

Topic #2: Compound Statements

Conjunction ☐	Read as: _____ True when _____ statements are true.
Disjunction ☐	Read as: _____ True when ____ _____ _____ statements is true.

Use the statements below to translate each compound statement. Determine the truth value.

p: Las Vegas is in California; q: Opposite angles of a parallelogram are congruent

5. $p \lor q$: _____

_____ Truth Value: _____

6. $p \land q$: _____

_____ Truth Value: _____

7. $p \lor \sim q$: _____

_____ Truth Value: _____

8. $\sim p \land q$: _____

_____ Truth Value: _____

Topic #3: Conditional Statements

Conditional	Read as: _____

Related Conditionals

Inverse	Converse	Contrapositive

Use the following statements to write conditional statements. Determine the truth value.

p: a line is tangent to a circle; q: it is perpendicular to the radius

9. Conditional: _____

_____ Truth Value: _____

10. Inverse: _____

_____ Truth Value: _____

11. Converse: _____

_____ Truth Value: _____

12. Contrapositive: _____

_____ Truth Value: _____

Topic #4: Bi-Conditional Statements

Bi-Conditional	Read as: _____
	True when both conditional $(p \rightarrow q)$ and converse $(q \rightarrow p)$ are true!

Write the conditional and converse of each statement below, then determine the true value of the bi-conditional.

13. It is Halloween if and only if it is October. **Truth Value:** _____

Conditional: _____

Converse: _____

14. $x = 5$ if and only if $x^2 = 25$ **Truth Value:** _____

Conditional: _____

Converse: _____

Topic #5: Laws of Logic

Law of Detachment:		Law of Syllogism:	

15. Write a valid conclusion from the given statements using the Law of Detachment:

Given: If the football team scores a field goal, then they will win the game.
Given: The football team scored a field goal.

Conclusion: _____

16. Write a valid conclusion from the given statements using the Law of Syllogism:

Given: If two triangles are congruent, then their corresponding sides are congruent.
Given: If the corresponding sides of two triangles are congruent, then their corresponding angles are congruent.

Conclusion: _____

_____

Determine if the conclusion that follows from the given statements is valid.
If yes, state which law. If not, write "invalid."

17. Given: If Mark gets an A in math, then he will make honor roll.
   Given: If Mark makes honor roll, then his mom will buy him a new skateboard.
   Conclusion: If Mark gets an A in math, then his mom will buy him a new skateboard.

   Answer: _____

18. Given: If a number is a whole number, then it is an integer.
   Given: If a number is an integer, then it is a rational number.
   Conclusion: If a number is a rational number, then it is a whole number.

   Answer: _____

19. Given: If a number is a multiple of 6, then it is divisible by 3.
   Given: 15 is not a multiple of 6
   Conclusion: 15 is not divisible by 3

   Answer: _____

20. Given: If a chord passes through the center of a circle, then it is a diameter.

   Given: Chord $\overline{AB}$ passes through the center of circle C.

   Conclusion: $\overline{AB}$ is a diameter.

   Answer: _____
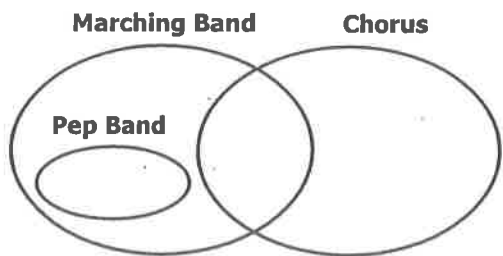
Topic #6: Venn Diagrams

Draw a Venn diagram to represent each relationship.

21. No skew lines are parallel.

22. All roses are flowers.

23. Some prime numbers are odd.

The Venn diagram below shows the relationship between students involved with the pep band, marching band, and chorus. Determine if each statement is true or false.

Marching Band   Chorus

Pep Band

24. Some students are in the marching band and chorus. _____

25. All students in the marching band are in pep band. _____

26. No students in the pep band are in chorus. _____

27. Some students are in the pep band, marching band, and the chorus. _____

The Venn diagram below shows the number of students who have visited certain cities as reported by a survey.

Dallas   Miami

10   4   12

3

8   5

16
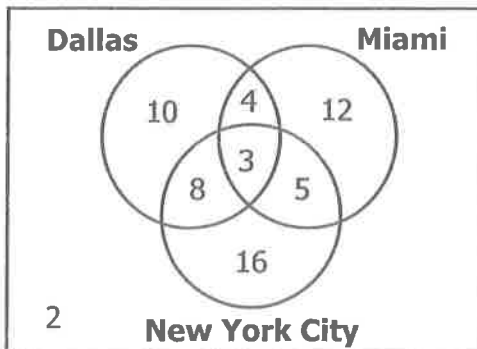
2   New York City

28. How many students have been to New York City? _____

29. How many students have been to Dallas and Miami? _____

30. How many students have been to Dallas and Miami, but not New York City? _____

31. How many students have not been to Dallas? _____

32. How many students have been to New York City or Miami? _____

33. How many students have been to all three cities? _____

34. How many students took the survey? _____

Topic #1: Angles in Triangles

1. Find the value of x.

$(3x + 16)°$

$(8x + 3)°$ $(10x - 28)°$

2. If $AC = BC$, find $m\angle C$.

A B

$(8x - 40)°$ $(5x - 1)°$

C

3. Find $m\angle PRQ$.

P $(8x + 2)°$

Q

$(16x - 7)°$ $(10x - 19)°$
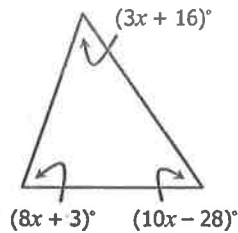
R
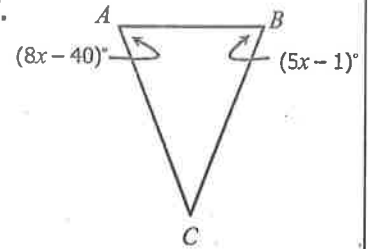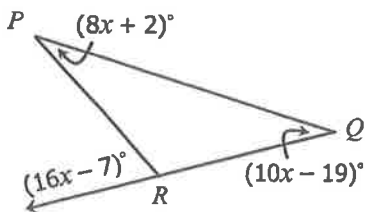
Topic #2: Relationships of Sides & Angles in Triangles

4. Which side lengths could form a triangle? Check all that apply.

☐ 8, 8, 17

☐ 2, 11, 12

☐ 20, 6, 15

☐ 19, 34, 15

5. Two sides of a triangle measure 7 feet and 19 feet. Write an inequality to represent the range of lengths for the third side.

6. Two sides of a triangle measure 24 inches and 29 inches. Which of the following lengths could represent the third side? Check all that apply.

☐ 7

☐ 31

☐ 58

☐ 60

7. Two sides of a triangle measure 3 meters and 8 meters. Write an inequality to represent the perimeter of the triangle.

8. In $\triangle DEF$, if $DE = 18$ ft, $EF = 5$ ft, and $DF = 19$ ft, order the angles from least to greatest.

9. Order the sides of the triangle below from least to greatest.

S

R $61°$ $56°$

T
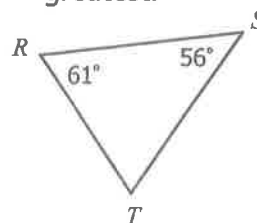
Topic #3: Congruent Triangles

10. If $\triangle PQR \cong \triangle WXY$, find each value.

Q, 17 cm, 88°, 27°, R, P, 15.4 cm

Y, 65°, X, 7.7 cm, W
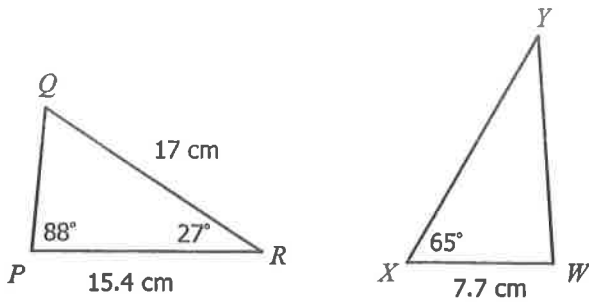
a) $PQ =$ _____

b) $YW =$ _____

c) $XY =$ _____

d) $m\angle Y =$ _____

e) $m\angle Q =$ _____

f) $m\angle W =$ _____

11. If $\triangle JKL \cong \triangle MNP$, find $m\angle M$.

K, $(9x - 24)°$, J, 63°, L

M, P, $(5x + 4)°$, N
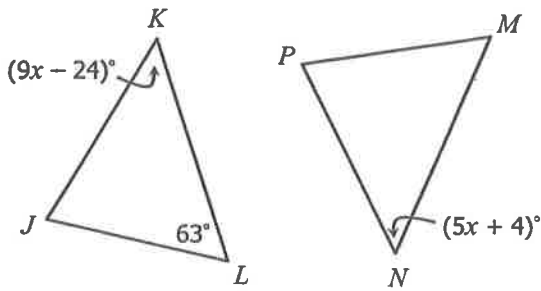
Topic #4: Proving Triangles are Congruent

List the 5 methods to prove two triangles are congruent:

_____

List reasons why SIDES are congruent:	**List reasons why ANGLES are congruent:**
• _____	• _____
• _____	• _____
• _____	• _____
	• _____
	• _____

Determine if the triangles are congruent. If yes, state which method and write a congruency statement.

12.

B, C, E, A, D

13.

R, W, X, T, S, Y

14.

G — 3 ft — H — 3 ft — I
J   K

15.

K   L   M
N

16.

B   E   F
D   C   G

17.

W
Z   X
Y
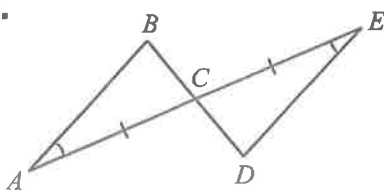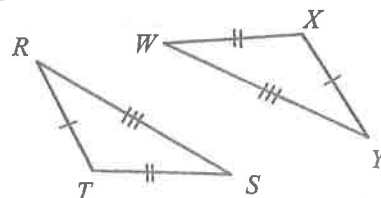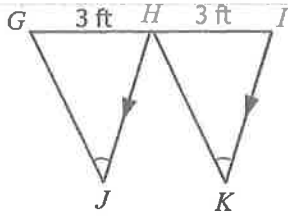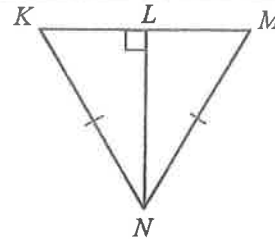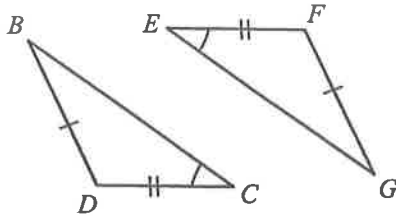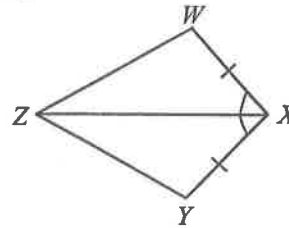
18. Given: $\overline{QS}$ bisects $\angle PSR$, $\angle QPS \cong \angle QRS$
   Prove: $\triangle QPS \cong \triangle QRS$
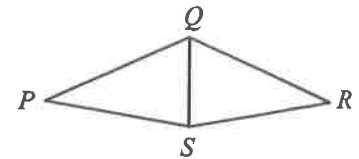
Statements	Reasons
1. $\overline{QS}$ bisects $\angle PSR$, $\angle QPS \cong \angle QRS$	**1.**
2. $\angle QSP \cong \angle QSR$	**2.**
3. $\overline{QS} \cong \overline{QS}$	**3.**
4. $\triangle QPS \cong \triangle QRS$	**4.**

19. Given: E is the midpoint of $\overline{CG}$ and $\overline{DF}$
   Prove: $\triangle CDE \cong \triangle GFE$
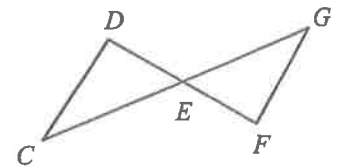
Statements	Reasons
1. E is the midpoint of $\overline{CG}$ and $\overline{DF}$	**1.**
2. $\overline{DE} \cong \overline{EF}$; $\overline{CE} \cong \overline{EG}$	**2.**
3. $\angle DEC \cong \angle FEG$	**3.**
4. $\triangle CDE \cong \triangle GFE$	**4.**

20. Given: $\overline{AB} \parallel \overline{CD}$, $\overline{AD} \parallel \overline{BC}$

Prove: $\triangle ADC \cong \triangle CBA$
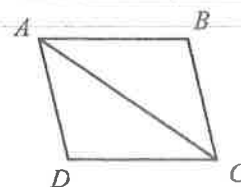
Statements	Reasons
1. $\overline{AB} \parallel \overline{CD}$, $\overline{AD} \parallel \overline{BC}$	1.
2. $\angle BAC \cong \angle DCA$; $\angle DAC \cong \angle BCA$	2.
3. $\overline{AC} \cong \overline{AC}$	3.
4. $\triangle ADC \cong \triangle CBA$	4.

21. Given: $\overline{KL} \cong \overline{MN}$; $\overline{KM} \cong \overline{NL}$

Prove: $\triangle KLM \cong \triangle NML$
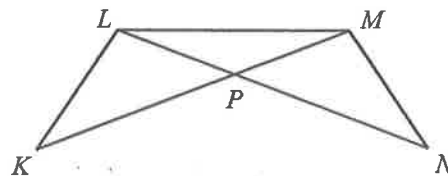
Statements	Reasons
1. $\overline{KL} \cong \overline{MN}$; $\overline{KM} \cong \overline{NL}$	1.
2. $\overline{LM} \cong \overline{LM}$	2.
3. $\triangle KLM \cong \triangle NML$	3.

22. $\triangle ABC$ has coordinates $A(-8, 5)$, $B(-4, 8)$ and $C(-7, 2)$. If $\triangle DEF$ has coordinates $D(-2, -1)$ and $E(2, 2)$, what must be the coordinates of F in order for $\triangle ABC \cong \triangle DEF$? Explain why the triangles are congruent and prove your answer using coordinate methods.
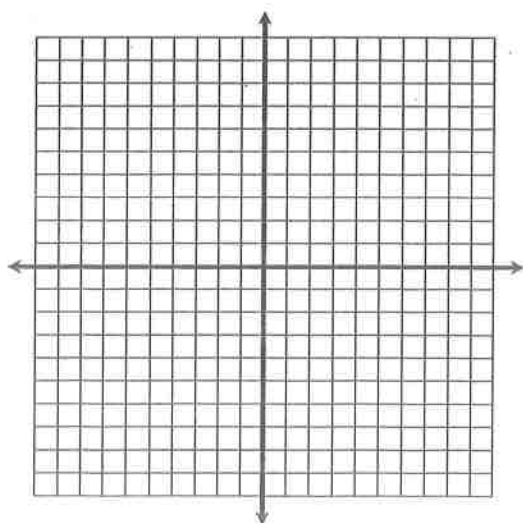
Topic #1: Similar Triangles

1. If $\triangle DEF \sim \triangle GHF$, find the value of x.

D
E
9x – 13
90
F
27
15
H
G
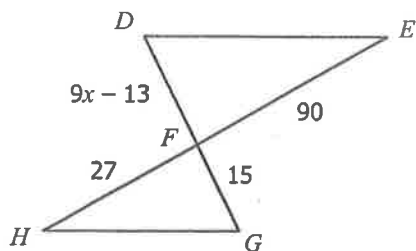
2. If $\triangle PQR \sim \triangle TSU$, find the value of x.

P   7x + 2   Q
S
35
x + 8
R   U   14   T

3. If $\triangle JKL \sim \triangle NML$, find JL.

K
M   4x – 12
24
J   N   21   L
├──── 2x + 9 ────┤
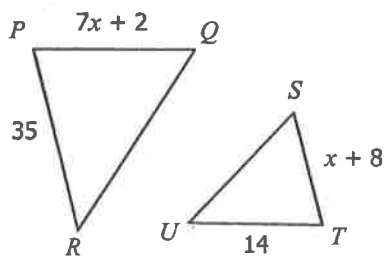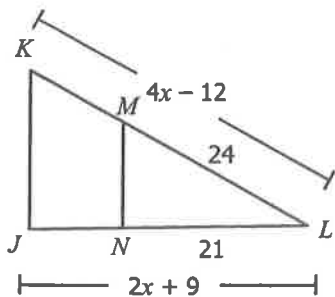
Topic #2: Proving Triangles are Similar

What are the methods to prove triangles are similar? _____
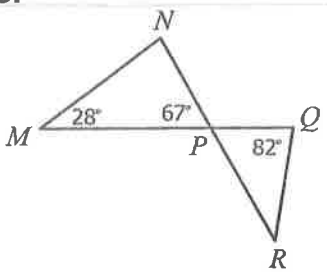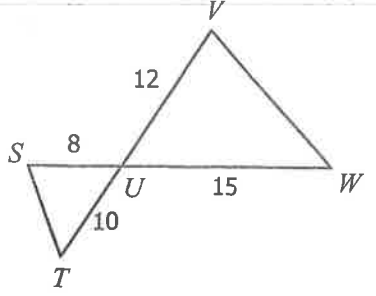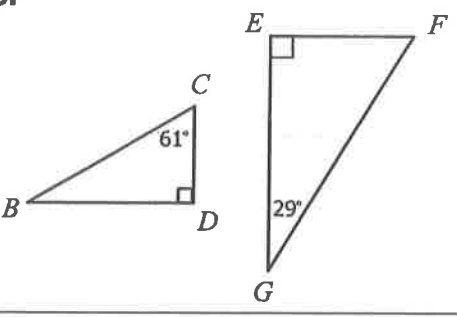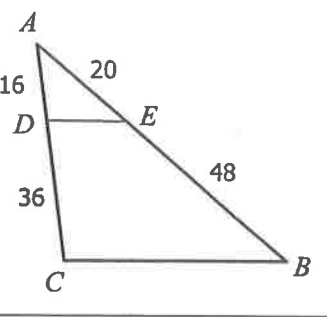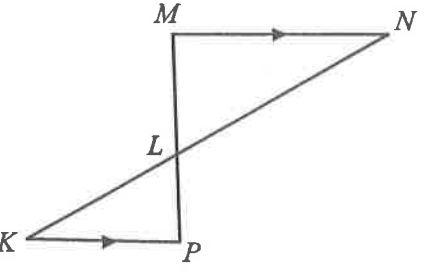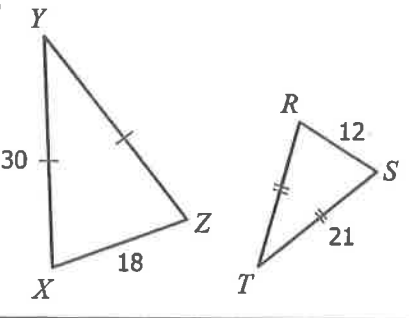
Determine if the triangles are similar. If yes, state which method.

4.

A
15   E
21   D   5
7   8   F
C   11.2   B

5.

W
Y
V   X   Z

6.

N, M 28°, 67° at P, Q, 82°, R

7.

V, 12, S, 8, U, 15, W, 10, T

8.

E, F, C, 61°, B, D, 29°, G

9.

A, 16, 20, D, E, 48, 36, C, B

10.

M, N, L, K, P

11.

Y, 30, X, 18, Z, R, 12, S, 21, T
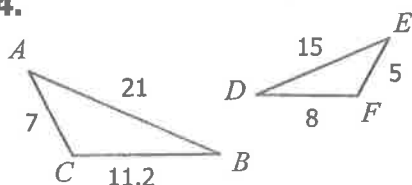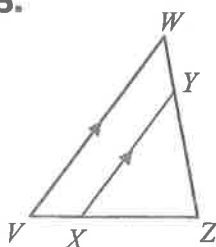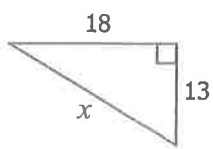
Topic #3: Pythagorean Theorem & Converse

Pythagorean Theorem:	**Pythagorean Theorem Converse:**
	Given $\triangle ABC$ with side lengths a, b, and c, if _____ then, $\triangle ABC$ is a _____ triangle.
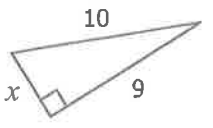
12. Which side lengths form a right triangle? Check all that apply.

☐ 16, 30, 34 ☐ 12, 19, 23 ☐ 8, 20, 22 ☐ 10.5, 14, 17.5

13. Solve for x.

18, 13, x

14. Solve for x.

10, x, 9

15. A baseball diamond is a square with each base 90 feet apart. Andy is standing on first base, while his teammate Logan is standing between 2nd and 3rd base. If the straight line distance from Andy to Logan is 98 feet, how far is Logan standing from 2nd base? Round your answer to the nearest tenth.

16. If $DC = 8.4$, $BC = 30$, and $AD = 42$, find AB. Round your answer to the nearest tenth.
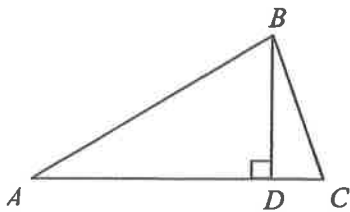
Topic #4: Special Right Triangles

Label the sides for each special right triangle.

45°-45°-90°
Special Right Triangle
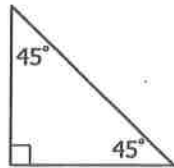
30°-60°-90°
Special Right Triangle
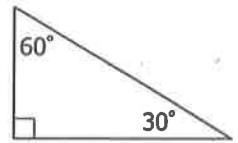
Find each missing value.

17.
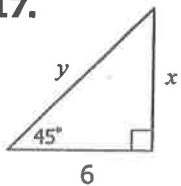
$x = $ _____
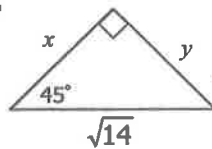
$y = $ _____

18.

$x = $ _____

$y = $ _____

19.

$x = $ _____

$y = $ _____

20.

$x = $ _____

$y = $ _____

21.

$x = $ _____

$y = $ _____

22.

$x = $ _____
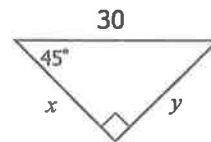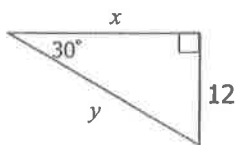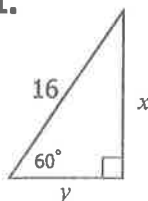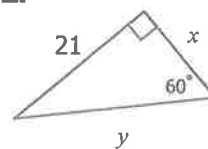
$y = $ _____

For Sine, Cosine, and Tangent, remember: _____

Find the value of each trigonometric ratio. Give your answer as a fraction in simplest form.

23.

- Sin W = _____
- Cos W = _____
- Tan W = _____
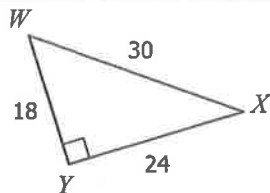
- Sin X = _____
- Cos X = _____
- Tan X = _____

Solve for x. Round your answer to the nearest tenth.

24.
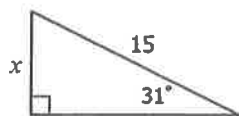
25.
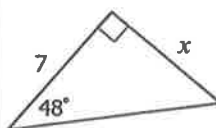
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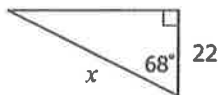
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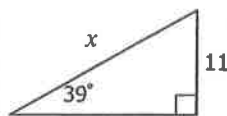
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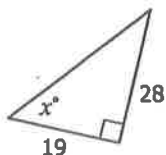
29.

30.
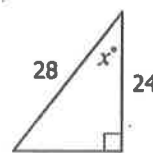
31. The angle of elevation from a buoy in the water to the top of a lighthouse is 68°. If the buoy is 300 feet from the base of the lighthouse, from the height of the lighthouse.

32. A wire is tied from the top of one tower to the top of another. The angle of depression from the top of the taller tower to the top of the shorter tower is 37°. If the wire is 100 feet long, find the distance between the towers.

Algebra I

Benchmark Test 1

1. Which elements of Set Z are both odd and multiples of 7?

   $Z = \{-21, -14, -7, 0, 7, 14, 21\}$

   A $\{-21, 21\}$
   B $\{-21, -7, 7, 21\}$
   C $\{-14, 0, 14\}$
   D $\{-21, -14, -7\}$

2. Order the numbers from least to greatest.

   $\frac{26}{3}, 6.8, \sqrt{13}, \sqrt{\frac{54}{3}}$

3. Which of the following will result in a rational number? Select all that apply.

   A $3\frac{2}{3} + \sqrt{\frac{36}{4}}$

   B $3\frac{2}{3} - \sqrt{\frac{6}{4}}$

   C $3\frac{2}{3} \div \sqrt{\frac{6}{4}}$

   D $3\frac{2}{3} \times \sqrt{\frac{36}{4}}$

4. What is the value of x in the equation?

   $4x + 2 - (3 + 3x) = 7$

   A $\frac{8}{7}$

   B $\frac{13}{10}$

   C 6

   D 8

5. The sum of three consecutive odd numbers is 51. What are the three numbers?

6. Melissa buys $2\frac{1}{2}$ pounds of salmon and $1\frac{1}{4}$ pounds of swordfish. She pays a total of $31.25, and the swordfish costs $0.20 per pound less than the salmon. What would be the combined cost of 1 pound of salmon and 1 pound of swordfish?

   A $15.60
   B $15.80
   C $16.60
   D $16.80

7. Terrell arranges x roses at $3.50 each with 10 carnations at $2.25 each. He makes a bouquet of flowers that averages $3.00 per flower. Write an equation to model the situation.

8. Find the value of x in the equation.

$$\tfrac{3}{4}(8x - 6) - 2 = \tfrac{1}{2} - x$$

9. Solve the equation $E = v + Ir$ for r.

A $r = \dfrac{E - v}{I}$

B $r = I(E - v)$

C $r = \dfrac{v + I}{E}$

D $r = E - v - I$

10. The formula for the volume of a square pyramid is $V = \tfrac{1}{3}s^2 h$.

Rewrite the formula in terms of h. Then find the height of a square pyramid with volume $V = 400$ cm³ and side length $s = 10$ cm.

11. Solve the inequality.

$$5(x + 1) - 10 \geq 2x + 3(x + 2)$$

A $x \geq -5$

B $x \leq 6$

C no solution

D all real numbers

12. Solve the compound inequality.
$9 - 4x \geq 5$ or $4(-1 + x) - 6 \geq 2$

A $x \geq 1$ or $x \geq 3$

B $x \leq 1$ or $x \geq 3$

C $x \leq -1$ or $x \leq 3$

D $x \geq -1$ or $x \geq 3$

13. Write a compound inequality for the graph below.

16. Graph the equation $y = 3x - 2$.
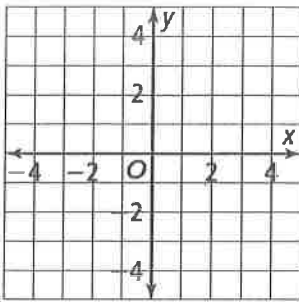
17. What is the equation of the line that passes through $(-5, 0)$ and $(4, 3)$?

   A $y = \frac{1}{3}x + \frac{5}{3}$

   B $y = -\frac{1}{3}x - 5$

   C $y = 3x + 15$

   D $y = -3x - 15$

18. Denzel must practice the piano for 210 min each week. He practices for 30 min each day. Write a linear equation to represent the number of minutes Denzel still has to practice after x days.

19. For the graph of the equation you wrote in Item 18, what does the y-intercept represent?

   A   number of days practicing each week

   B   number of minutes practicing each day

   C   number of hours practiced each week

   D   number of minutes practiced each week

20. For which values of A, B, and C will $Ax + By = C$ be a horizontal line through the point $(-4, 2)$?

   A $A = 1, B = 0, C = 2$

   B $A = 1, B = 0, C = -4$

   C $A = 0, B = 1, C = 2$

   D $A = 0, B = 1, C = -4$

21. What is an equation of the line shown on the graph in point-slope form, using the point $(1, -1)$?

Name _____
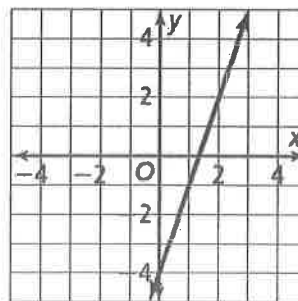
22. What is an equation in point-slope form of the line that passes through (−3, −1) and has a slope of 2?

A $y - 1 = 2(x - 3)$

B $y + 1 = 2(x + 3)$

C $y - 1 = 2(x + 3)$

D $y + 1 = 2(x - 3)$

23. What is the equation in standard form of the line that has x-intercept −4 and y-intercept 3?

24. What are the x-intercept and the y-intercept of the graph of $12x - 4y = 48$?

A x-intercept: 3; y-intercept: −12

B x-intercept: 4; y-intercept: 12

C x-intercept: 4; y-intercept: −12

D x-intercept: 3; y-intercept: 12

25. Dwayne has $80 to spend on video games. Used video games cost $10 each, and new video games cost $20 each. What equation in standard form determines the number x of used video games and the number y of new video games he can buy?

26. For the situation in Item 25, which of the following represent possible combinations of video games that Dwayne can buy? Select all that apply.

A (0, 4)   C (7, 2)

B (2, 3)   D (8, 0)

27. Determine whether the lines are *parallel, perpendicular,* or *neither*.

$$2x + 4y = 32 \qquad y = -\tfrac{1}{2}x + 16$$

28. Which lines are perpendicular to $3x - y = 10$? Select all that apply.

A $y = 3x + 5$

B $y = -\tfrac{1}{3}x + 17$

C $x + 3y = 27$

D $y - 2 = \tfrac{1}{3}(3x + 36)$

29. Line *m* passes through point (−2, −1) and is perpendicular to the graph of $y = -\tfrac{2}{3}x + 6$. Line *n* is parallel to line *m* and passes through the point (4, −3). What is the equation in slope-intercept form of line *n*?

30. What is the y-intercept of the line $y - 14 = 6(x - 2.5)$?

Benchmark Test 2

1. What is the value of x in this equation?

   $4(x + 6) - 3x = 26$

   A 20   C 2
   B 50   D 10

2. Kendall bought 6 notebooks and 3 pens for a total of $27. The cost of one notebook is $1.50 more than the cost of one pen. What is the combined cost of one notebook and one pen?

3. Solve the equation $A = \frac{1}{2}bh$ for h.

4. Graph the solution of the inequality on the number line.

   $2(x - 3) - 5x < x - 2$
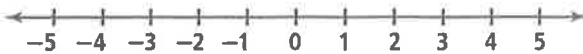
6. Graph the linear equation $y = -\frac{2}{3}x + 4$.
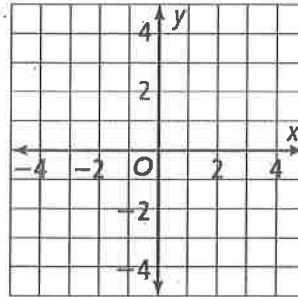
7. Which of the following is an equation of the line through $(11, -3)$ and $(7, 9)$?

   A $y = -\frac{1}{3}x - \frac{20}{3}$

   B $y = \frac{1}{3}x - \frac{20}{3}$

   C $y = -3x + 30$

   D $y = 3x - 12$

8. What is an equation in standard form of the line that has x-intercept 1 and y-intercept 4?

   A $x - 4y = 4$
   B $4x - y = 4$
   C $4x + y = 4$
   D $x - 4y = -4$

9. Write the equation in slope-intercept form of the line that passes through (12, 9) and is perpendicular to the graph of $y = -\frac{3}{4}x + 1$.

_____

10. Identify the domain and range of the function.
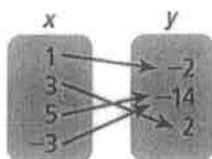
domain: _____

range: _____

_____

11. A hardware store rents vacuum cleaners that customers may use for part or all of a day before returning. The store charges a flat fee plus an hourly rate. Write a linear function f for the total rental cost of a vacuum cleaner.

Hours	1	1.5	2	2.5	3
Cost ($)	20	23	26	29	32

A   f(x) = 6x + 14
B   f(x) = 3x + 14
C   f(x) = 3x + 22
D   f(x) = 6x + 24

_____

12. In Item 11, how much is the flat fee that the store charges?

13. Which is a reasonable domain for the function in Item 11?

A   14 < x ≤ 32
B   0 < x ≤ 6
C   0 < x ≤ 12
D   14 < x ≤ 86

_____

14. In Item 11, what would be the cost to a customer to rent a vacuum for 7 hours?

_____

17. Each day, Amaya studies language flashcards and then reads some pages in a novel, as shown in the table. Make a scatter plot of the total time she studies as a function of the number of pages she reads. Draw a trend line.

Pages	4	6	8	10	12
Time (min)	27	32	39	45	51
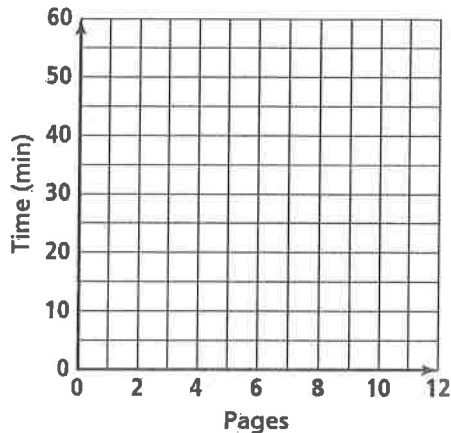
18. What type of correlation does the scatter plot in Item 17 show?

   A positive

   B negative

   C none

   D cannot tell

19. Which could be an equation of a trend line for the data in Item 17?

   A $y = 4x + 12$

   B $y = 5x + 12$

   C $y = 6x + 10$

   D $y = 3x + 14$

22. The table shows the ages and weights of six kittens. Do the data show a *positive* or a *negative* correlation?

Age (weeks)	2	4	6	8	10
Weight (oz)	8	14	23	31	42

23. Estimate the solution of the system of equations from the graph.
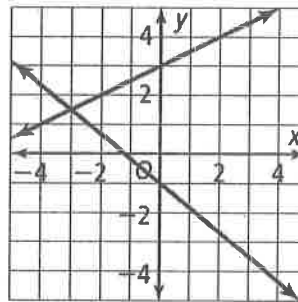
solution: _____

24. What is the solution of the system of equations?

$$y = \frac{2}{3}x + 5$$

$$7x - 3y = 15$$

A (0, 5)

B $(2, \frac{19}{3})$

C $(4, \frac{23}{3})$

D (6, 9)

25. What is the solution of the system of equations?

$$y = -\frac{7}{2}x + 11$$

$$7x + 2y = 20$$

26. Ten granola bars and twelve bottles of water cost $23. Five granola bars and four bottles of water cost $10. How much do one granola bar and one bottle of water cost?

27. Graph the inequality $y > \frac{2}{3}x - 1$.
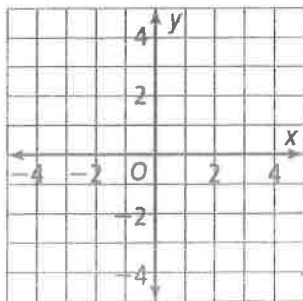
28. In the graph of an inequality, the region below a dashed horizontal line through the point (4, 1) is shaded. What inequality does the graph represent?

A $x < 4$

B $y < 1$

C $y > 1$

D $x > 4$

29. Graph the system of inequalities.

$$2x - y \le 3$$

$$x - 2y \ge -2$$
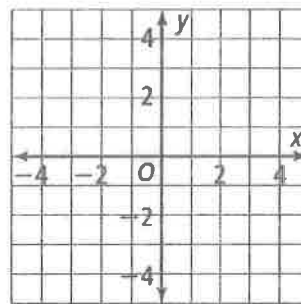
30. For a fundraiser, a group plans to sell granola bars and bottles of water at the same prices as described in Item 26. The group wants the income from the fundraiser to be at least $150. Write an inequality to show the numbers of granola bars x and bottles of water y that the group needs to sell.

Benchmark Test 3

1. Marisol buys 3 pounds of cheese and 3 pounds of sausage for a total cost of $36. The sausage costs $2.00 less per pound than the cheese. What is the combined cost of 1 pound of cheese and 1 pound of sausage?

   A $16

   B $12

   C $8

   D $6

2. Write a compound inequality for the graph below.

3. Write the equation in standard form of the line that has x-intercept 7 and y-intercept 4.

6. What is the solution of the system of equations?

   $$4x - 3y = -1$$
   $$3x - 9y = 33$$

7. Find the vertex of the graph of $f(x) = -0.75 |x + 3|$. Tell whether the graph opens *upward* or *downward*.

11. Simplify the following, and write your answer in standard form.

$$(-2x - 3) - (3x^2 - 8x + 9)$$

12. Find the product.

$$(7x^2 - 3)(8x^2 - 7x + 5)$$

13. Find the product.

$$(3y - 5)(3y + 5)$$

14. Which of the expressions shown has a GCF of $5ab^2$ with $15ab^3$?

    A $30ab^2$

    B $30a^2b^5$

    C $25ab^2$

    D $5ab$

15. What is the factored form of $x^2 - x - 20$?

    A $(x - 5)(x - 4)$

    B $(x - 5)(x + 4)$

    C $x(x + 4) - 5(x + 4)$

    D $x(x - 1) - 20$

16. Factor $10y^2 + 54y - 36$.

    A $2(y - 6)(5y + 3)$

    B $(2y + 12)(5y - 3)$

    C $2y(5y + 27) - 36$

    D $2(y + 6)(5y - 3)$

17. Factor the perfect square trinomial $4x^2 - 20x + 25$.

_____

18. The graph of $f(x) = ax^2$ opens upward and is narrower than the graph of $g(x) = x^2$. Which of the following could be the value of a?

A −0.5

B 6

C 0.25

D −2

_____

20. Graph the function $f(x) = 3(x - 4)^2 + 5$ and identify its vertex.
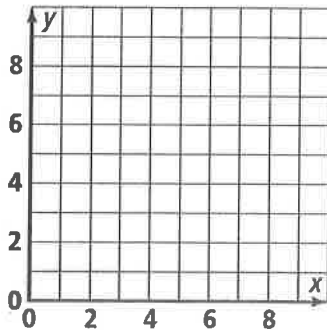
vertex: _____

21. Which of the following functions has a graph with a vertex that is a translation 6 units horizontally to the left of the vertex of the graph of $f(x) = (x - 4)^2 + 8$?

A $h(x) = (x - 4)^2 + 14$

B $h(x) = (x + 2)^2 + 8$

C $h(x) = (x - 10)^2 + 8$

D $h(x) = (x - 4)^2 + 2$

_____

23. What is the axis of symmetry of the graph of the function $f(x) = -4x^2 + 16x - 15$?

A $x = -2$

B $y = 2$

C $x = 2$

D $x = 4$

_____

24. The function $h(t) = -16t^2 + 40t$ models the height, in feet, of a ball t seconds after it is thrown into the air. What is the maximum height the ball reaches after it is thrown?

A 25 ft

B 27 ft

C 50 ft

D 75 ft

25. Edgar builds a sand castle with a rectangular base. The side lengths of the base are 25 in. and 16 in. He wants to surround the castle's base with a moat that is w inches wide. Write a quadratic function A in standard form to represent the combined area taken up by the castle and the moat.

26. Which function best models the data in the table?

Time, t (s)	Distance, d (m)
0	2.0
0.5	4.6
1	7.0
1.5	6.5
2	3

A $d(t) = -4.33t^2 + 1.64t + 9.45$

B $d(t) = 1.63t^2 - 9.45t + 4.34$

C $d(t) = 1.63t^2 + 9.45t - 4.34$

D $d(t) = -4.33t^2 + 9.45t + 1.64$

Benchmark Test 4

1. Which of the following will result in a rational number? Select all that apply.

   A $5\frac{2}{3} \times \frac{\sqrt{16}}{2}$

   B $5\frac{2}{3} + \frac{\sqrt{7}}{4}$

   C $5\frac{2}{3} \div \frac{\sqrt{7}}{4}$

   D $5\frac{2}{3} - \frac{\sqrt{16}}{2}$

2. Kelley has to work 45 hours at her job to earn enough money to buy a phone. She works 3 hours each day. If she has worked x days, write a linear equation to represent how many more hours Kelley must work to afford the phone.

3. For the graph of the equation you wrote in Item 3, what does the y-intercept represent?

   A Total hours still needed to work after x days

   B Work hours completed each day

   C Total number of workdays needed to earn the phone

   D Total number of work hours needed to earn the phone

4. Identify the domain and range of the relation.
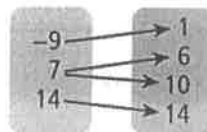
   domain: _____

   range: _____

5. Which inequality does the graph represent?
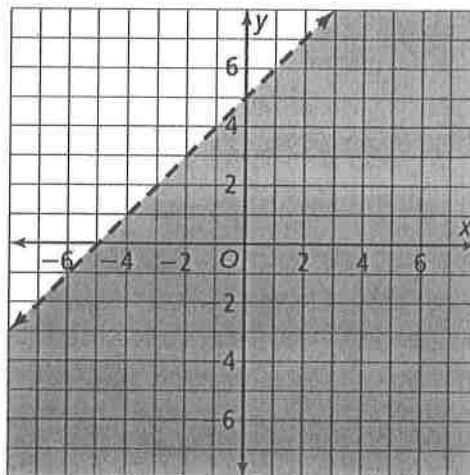
   A $y \le x + 5$ C $y < x + 5$

   B $y > x + 5$ D $y \ge x + 5$

10. Identify the vertex and y-intercept of the graph of the function $y = (x + 2)^2 - 3$.

vertex: _____

_y_-intercept: _____

11. Solve $3y^2 - 17y + 10 = 0$ by factoring.

12. Find the solutions of $-4 + x^2 = -3x$ by graphing.
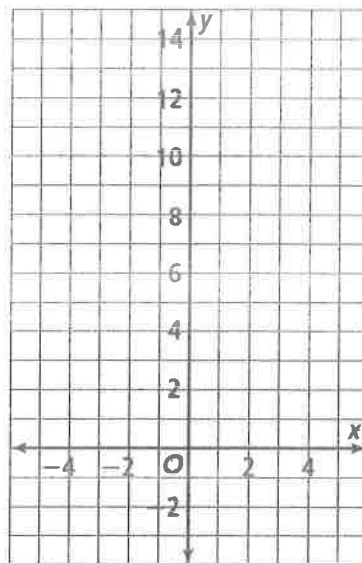
solutions: _____

13. What are the coordinates of the vertex of the graph of $y = x^2 + 14x + 33$?

A $(-16, 7)$

B $(16, -7)$

C $(7, -16)$

D $(-7, -16)$

15. Which equations have only one real solution? Select all that apply.

   A $4x^2 + 5x + 3 = 5x + 3$

   B $2x^2 + x - 7 = x + 7$

   C $-9x + x^2 = -9x$

   D $5x^2 = 14$

16. Solve the system of equations.

$$y = -4x$$

$$y = 2x^2 - 15x$$

17. The graph of $f(x) = 2x^2 + x - 15$ passes through the points $(0, -15)$ and $(-3, 0)$. What is a zero of the function?

18. Solve $x(18 - x) = 2(9x - 32)$.

19. The height off the ground, in feet, of a squirrel leaping from a tree branch is given by the function $H(x) = -16x^2 + 24x + 15$, where x is the number of seconds after the squirrel leaps. How many seconds after leaping does the squirrel reach its maximum height?

   A 1.33 s

   B 0.50 s

   C 0.75 s

   D 1.00 s

20. Which of the following are factors of $x^8 - 256$? Select all that apply.

   A $x^4 - 16$

   B $x^2 + 16$

   C $x^2 + 4$

   D $x^4 - 4$

21. Consider the functions $f(x) = 3x^2 - 14$ and $g(x) = -12x + 4$. Which statements about $f + g$ are true? Select all that apply.

   A The domain is $x \geq 0$.

   B It is a quadratic function.

   C The range is $y \geq -22$.

   D The range is all real numbers.

26. Complete using >, <, ≥, or ≤ and the correct value: The range of $f(x) = -\sqrt{x-7} + 5$ is $f(x)$ _____.

28. If $f(x) = 2x - 5$ and $g(x) = 5x - 2$, what is $f \cdot g$?

A $f(x) \cdot (g)x = 10x^2 - 29x + 10$

B $f(x) \cdot (g)x = 10x + 10$

C $f(x) \cdot (g)x = 7x - 7$

D $f(x) \cdot (g)x = 10x^2 + 29x - 10$

Civics at Home Review Material:

Foundations of Government, Citizenship, Political Parties, and The Three Branches of Federal Government.

1. **Citizenship Review Discussions: Tie what your child is learning in school to your home by engaging in conversation. Help make the learning more meaningful by connecting the value of citizenship and the rights, duties, and responsibilities that come with it to your own lives.**
      i. • Share your family members or neighbors' journey to American citizenship.
      ii. • Tell your child about your own experiences that were touched by the freedoms of the First Amendment.
      iii. • Talk about your family's experiences with jury duty, the armed services, or paying taxes.
      iv. • Discuss your experiences with voluntary community service.
      v. • Share your thoughts on, and participation in, the voting process.
   b. Students- write 3-10 sentences about your family discussion. If you'd like to record your discussion in a Google Doc and share it with us, we'd LOVE to see what you're working on, otherwise, record it in your notebook and we will discuss upon our return. :)

2. <u>Review Political Parties by:</u>
   a. Discuss the upcoming election, and make connections to what your child has learned in class.
   b. Share your voting card with your student, let them look at it and ask questions. Discuss where you go to vote and when you registered.
   c. Students- write 3-10 sentences about your family discussion. If you'd like to record your discussion in a Google Doc and share it with us, we'd LOVE to see what you're working on, otherwise, record it in your notebook and we will discuss upon our return. :)

3. <u>Documents Review:</u>
   a. We know that the Preamble is the introduction to the Constitution and explains the goals and purposes of the United States- What elements of the Preamble are being implemented during our State of Emergency due to COVID-19?

4. <u>Three Branches:</u>

BRANCH	FEDERAL
Legislative	Main Job: Who's in Charge:
Executive	Main Job: Who's in Charge:
Judicial	Main Job: Who's in Charge:

5. **Daily Life under COVID-19:** Keep a daily living history journal. We are experiencing something very different with Covid-19. Keep a journal of how your day was different each day from a typical school day. What did you do? Did you enjoy your day? (can be in google docs, don't forget to share it with us!)

We would like to encourage you to get outside and enjoy your days. Have family time, read together, play games, watch movies, talk. Keep washing those hands. We can't wait to see you again and hear about your experiences.

I hope everyone stays well, please do not hesitate to email or message through Remind or Google Classroom with questions or concerns. For more review material or SOL preparation visit www.solpass.org , Civics and Economics. The password for solpass is : rmms AND/OR www.icivics.org

Warm Regards,

Mrs. Yates   Mrs. Woodard   Mrs. White
jyates@bcps.k12.va.us   hwoodard@bcps.k12.va.us   vwhite@bcps.k12.va.us
@rmmscivics   @8be2b2   @rm8civics

<u>Remind information:</u>
text the codes to the number 81010

Physical Science 8

Identifying Independent and Dependent Variables
in a Science Question

In a correctly written experimental design question, you will be able to identify the independent and dependent variables by where they are in the question. The independent variable is stated in the first part of the sentence and identifies what you are testing. The dependent variable is stated at the end of the question and identifies what you are measuring.

    IV   DV
Example: Will adding **different substances to water** affect *how long it takes to freeze?*
  IV - the different substances added to water
  DV - the time it takes the water to freeze

In the following sentences, identify the independent variables and the dependent variables.

1. Does the type of liquid (oil, water, alcohol, syrup, dish soap) affect the time it takes to freeze?

   I V _____

   DV _____

2. Does the type of insulation (wool, paper, leather, styrofoam, cotton) affect the time it takes water to cool?

   I V _____

   DV _____

3. Does the color of ketchup affect the number of times it is purchased by consumers?

   I V _____

   DV _____

4. Does the type of surface affect the height a marble will bounce?

   I V _____

   DV _____

5. Does the mass of an object affect how fast it falls from a given height?

   I V _____

   DV _____

Name _____

Step 2: Collect Information (Part 2)

Write IV, DV, or CV in the blank after each description below to identify which type of variable is described.

| IV = Independent Variable | DV = Dependent Variable | CV = Constant Variable |

1. The factors that are kept the same in an experiment. _____

2. This is also known as the responding variable. _____

3. This is the one thing that is changed by the experimenter. _____

4. This is also called the manipulated variable. _____

5. This is the factor that is affected as a result of changing the manipulated variable. _____

6. This variable must be measurable to obtain results. _____

7. There may be many of this type of variable in an experiment. _____

Carefully read each of the experiments below. Then examine the independent variable (IV), dependent variable (DV), and constant variables (CV) that are listed. ONE of these variables is incorrect. Identify which variable is incorrect AND write the correct description of that variable on the line provided. Be careful! Only ONE variable is wrong in each experiment!

8. Two groups of students were timed to compare how fast they could complete a set of math problems. Each group was given the same problems. One group used calculators. The other group did not use calculators.
   - IV: Using or not using calculators
   - DV: Amount of problems solved correctly
   - CV: Same math problems

   The ____ is wrong. Here is what it should be: _____

9. Students of different ages were given the same puzzle to put together. The time it took each student to complete the puzzle was compared.
   - IV: Boy or girl students
   - DV: Time to complete the puzzle
   - CV: Same puzzle

   The ____ is wrong. Here is what it should be: _____

10. Amy wants to find out if Retro nail polish will last longer than Viva nail polish. She put one coat of Viva on the nails on her left hand and one coat of Retro on the nails on her right hand.
    - IV: Brand of nail polish
    - DV: Time the nail polish lasts
    - CV: Which hand she puts the nail polish on

    The ____ is wrong. Here is what it should be: _____

11. Jason thinks that a heavier paper airplane will fly farther. He is adding small paper clips to his paper airplane to decide what amount of weight makes the airplane fly the farthest.
    - IV: Type of paper airplane
    - DV: Distance the airplane flies
    - CV: Size of paper clips

    The _____ is wrong. Here is what it should be: _____

Name: _____

For each item below, specify the independent and dependent variables, as well as constants.

1. A study was done to find if different tire treads affect the braking distance of a car.

    I: _____   D: _____   C: _____

2. The time it takes to run a mile depends on the person's running speed.

    I: _____   D: _____   C: _____

3. The height of bean plants depends on the amount of water they receive.

    I: _____   D: _____   C: _____

4. The higher the temperature of the air in the oven, the faster a cake will bake.

    I: _____   D: _____   C: _____

5. Lemon trees receiving the most water produced the most lemons.

    I: _____   D: _____   C: _____

6. An investigation found that more bushels of potatoes were produced when the soil was fertilized more.

    I: _____   D: _____   C: _____

7. Students measured the temperature of the water at different depths in Lake Skywalker and found that the temperature varied.

    I: _____   D: _____   C: _____

8. The amount of pollution produced by cars was measured for cars using gasoline containing different amounts of lead.

    I: _____   D: _____   C: _____

9. Four groups of rats are first massed and then fed identical diets except for the amount of vitamin A they receive. Each group gets a different amount. After 3 weeks on the diet, the rats' masses are measured again to see if there has been a decrease.

    I: _____   D: _____   C: _____

Identifying Variables & Designing Investigations Examples

1. For example: Students of different ages were given the same jigsaw puzzle to put together. They were timed to see how long it took to finish the puzzle. Identify the variables in this investigation.
   a. Independent Variable: _____
   b. Dependent Variable: _____
   c. Constants: _____
   d. Control: _____

2. Another example: An investigation was done with an electromagnetic system made from a battery and wire wrapped around a nail. Different sizes of nails were used. The number of paper clips the electromagnet could pick up was measured. What are the variables in this investigation?
   a. Independent Variable: _____
   b. Dependent Variable: _____
   c. Constants: _____
   d. Control: _____

3. One more: The higher the temperature of water, the faster an egg will boil. What are the variables in this investigation?
   a. Independent Variable: _____
   b. Dependent Variable: _____
   c. Constants: _____
   d. Control: _____

4. Last one: The temperature of water was measured at different depths of a pond. What are the variables in this investigation?
   a. Independent Variable: _____
   b. Dependent Variable: _____
   c. Constants: _____
   d. Control: _____

5. Designing Investigations #1: The greater the amount of soap in a soap and water mixture, the bigger a soap bubble can be blown. What are the variables in this experiment?
   a. Independent Variable: _____
   b. Dependent Variable: _____
   c. Constants: _____
   d. Control: _____

6. Designing Investigations #2: The farther a ball drops, the higher it will bounce. What are the variables in this experiment?
   a. Independent Variable: _____
   b. Dependent Variable: _____
   c. Constants: _____
   d. Control: _____

P.S. 1

Temperature+States of Matter Practice Questions
Exam not valid for Paper Pencil Test Sessions

[Exam ID:B5LZ44]

1
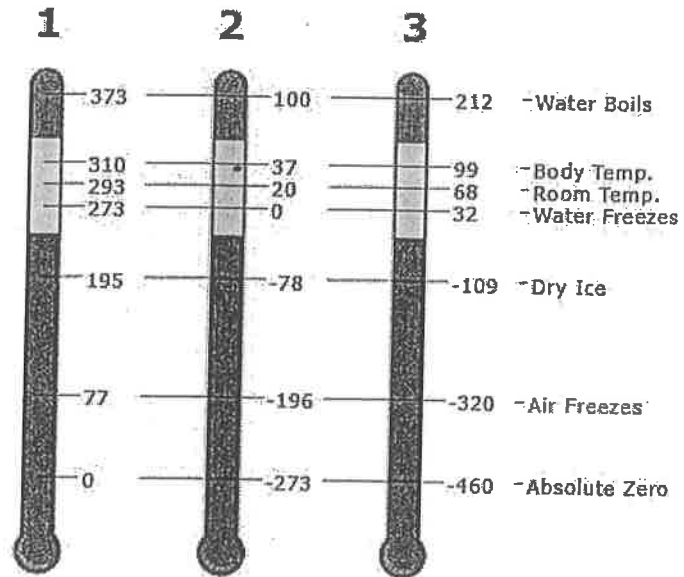
Thermometer number 1 represents temperatures in degrees —

A Celsius
B Absolute
C Fahrenheit
D Kelvin

P.S. 1

2

Heating Water
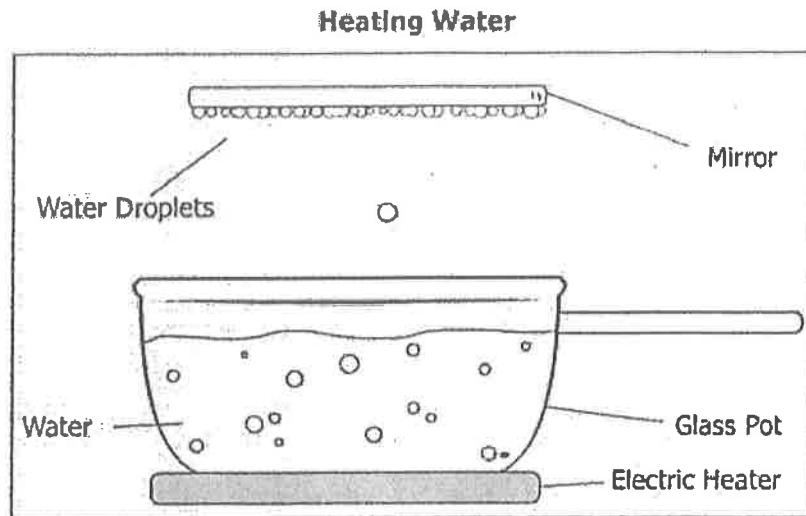
The volume of water in the pot decreases during this investigation. Water droplets form on the mirror when positioned over the pot. In this setup, water —

A vaporizes and then freezes
B vaporizes and then condenses
C condenses and then vaporizes
D freezes and then vaporizes

3

Select the statements below that indicate absolute zero.

It is when water freezes.
It is when all molecular motion stops.
0°C
It is the coldest possible temperature.
0 K

4

Which of the following temperatures would NOT allow molecule movement?

−175° C	−273° C	0 K
100 K	0° C	32 K

5 On what temperature scale does water freeze at 0° and boil at 100°?

A Kelvin
B Fahrenheit
C Bohr
D Celsius

6

Convert 43 °C to K. Type your answer in the box.

K

7 The freezing point of Liquid Nitrogen is 77K. How would you calculate the freezing point of Liquid Nitrogen in degrees Celsius?

A subtract 273 from 77K
B add 32 to 77K
C add 273 to 77K
D subtract 212 from 77K

8 A student is measuring the temperature of a glass of ice while it is melting. The student measures the initial temperature and then waits three minutes before measuring the temperature again.

What is the temperature most likely to be when it is measured the second time?

A 32°C
B 20°C
C 10°C
D 0°C

9 What is NOT a state of matter?

A Liquid
B Element
C Gas
D Solid

10 After fishing in the ocean, a student left his fishing gear in the sun to dry. Later, he noticed that small white crystals had formed on the rod, reel, and fishing line. Which of these is the *best* explanation of what occurred?

A The water evaporated from the fishing gear, and salt from the ocean was left behind.

B The salt in the ocean water reacted with the fishing gear and caused it to rust.

C The water evaporated from the fishing gear, and sand was attracted to it.

D The fish that were caught left scales on the fishing gear.

14. Draw a picture in the boxes below of the molecules in the **three states of matter**.

SOLID	LIQUID	GAS

Determine the measurements on the triple beam balance.

0 10 20 30 40 50 60 70

0 100 200 300

0 1 2 3 4 5 6 7

15. Triple Beam Balance Reading = _____

0 10 20 30 40 50 60 70

0 100 200 300

0 1 2 3 4 5 6 7

16. Triple Beam Balance Reading = _____

*Determine the **volume** and **density** of the objects below.*

Mass of Object	Initial Volume	Final Volume	Volume of Object	Density of Object D = m/v
17. 2 grams	40 30 20 10	40 30 20 10		

P.S. 1-4

Name: _____   Date Given: _____   Due Date: _____

Matter Part I Vocabulary

Match the following terms with their definitions.

_____1. Matter

_____2. Solid

_____3. Liquid

_____4. Gas

_____5. Mass

_____6. Volume

_____7. Density

_____8. Physical Property

_____9. Chemical Property

A. Measurement of the amount of matter in an object.

B. State of matter with definite volume but not definite shape.

C. Amount of matter contained in a given volume.

D. A characteristic that is observed when a substance reacts with another substance.

E. Amount of space an object occupies.

F. State of matter that does not have a definite shape of volume.
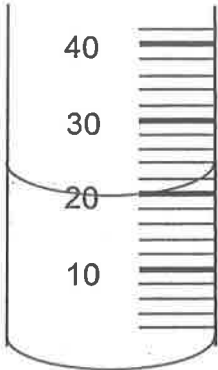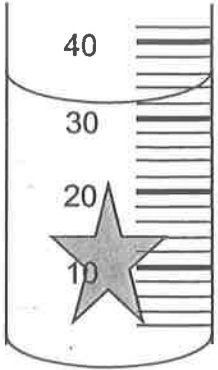
G. A characteristic of a substance that can be observed without changing the substance into anything new.

H. Anything that has mass, volume and is made of atoms.

I. State of matter with definite shape and volume.

Complete the diagram below

PROPERTIES OF MATTER

10._____ Property: Characteristic that can be observed about an object without changing the object.

11._____ Property: Characteristic that is observed when a substance interacts or reacts with another substance.

12. Examples:
1.
2.
3.
4.
5.

13. Examples:
1.
2.
3.
4.
5.
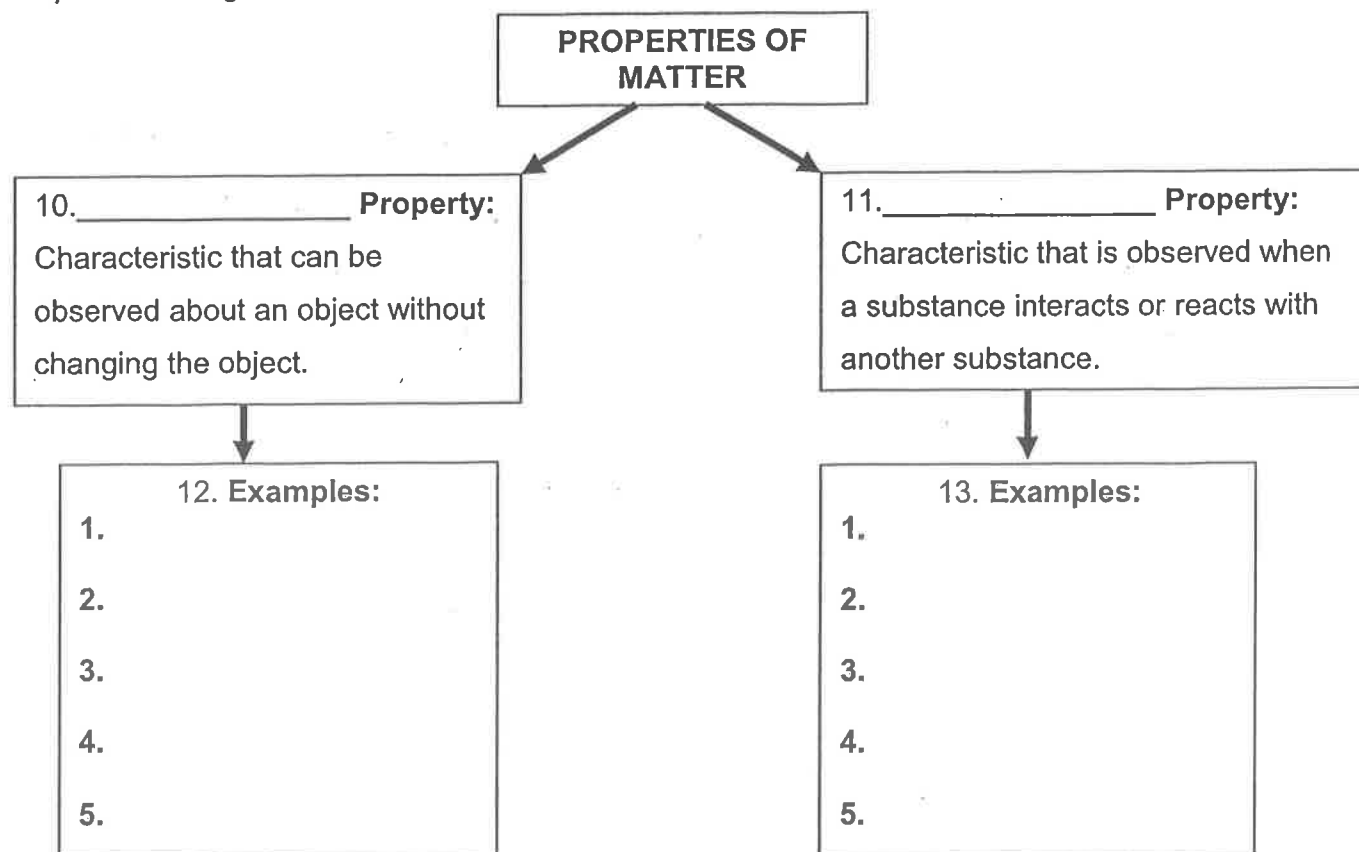
Mass of Object	Initial Volume	Final Volume	Volume of Object	Density of Object $D = m/v$
18. 24 grams	40 30 20 10	40 30 20 10		

19-30 Identify each of the properties below as either a physical (P) or a chemical (C) property.

_____19. Ability to burn (combustibility)

_____20. Density

_____21. Malleability

_____22. Copper's ability to tarnish

_____23. Mass

_____24. Volume

_____25. Melting point

_____26. Ductility

_____27. Flammability

_____28. Smell

_____29. Texture

_____30. Hardness

1.) Physical and chemical weathering processes are responsible for breaking down rocks. Which of these is an example of chemical weathering by water?

    a.) Mineral crystals form as water evaporates from rocks
    b.) Limestone reacts with acid rain and dissolves.
    c.) Water freezes in rock cracks and causes the rock to split.
    d.) Moss collects and grows on the surface of rocks.

2.) The phase of matter an object is in would be an example of a:

    a.) Physical property   b.) chemical property

3.) Matter is:

    a.) How much mass an object has
    b.) An objects mass and how much space it takes up
    c.) Anything that takes up space
    d.) None of the above

4.) In which phase of matter are the atoms/particles not wanting to touch each other?

    a.) Solid   b.) liquid

    c.) gas   d.) plasma

In question 5 classify the following as either a physical or chemical change. If it is a physical change mark **a**; If it is a chemical change mark **b**.

5.) Water evaporating from the ocean

Multiple Choice: Choose the best answer for the following questions below.

6.) A key indicator that an exothermic reaction has occurred would be:

    a.) increase in temperature   b) drop in temperature   c.) release of energy

    d.) absorption of energy   e.) both a and c   f.) both b and d

7.) The following will only exhibit **physical** properties:

a.) elements   b.) mixtures   c.) compounds

d.) both a and b   e.) both a and c

8.) The following will only exhibit **chemical** properties:

a.) elements   b.) mixtures   c.) compounds

d.) both a and b   e.) both a and c

9.) The particle model of matter states:

a.) All matter cannot be created or destroyed but only changes forms

b.) All matter is made up of substances that can be either chemically or physically combined together.

c.) All matter is made up of tiny particles called atoms that are constantly in motion. Their speed depends on the phase of matter it is in.

d.) all of the above

e.) none of the above

Use the following graph below to answer question 10
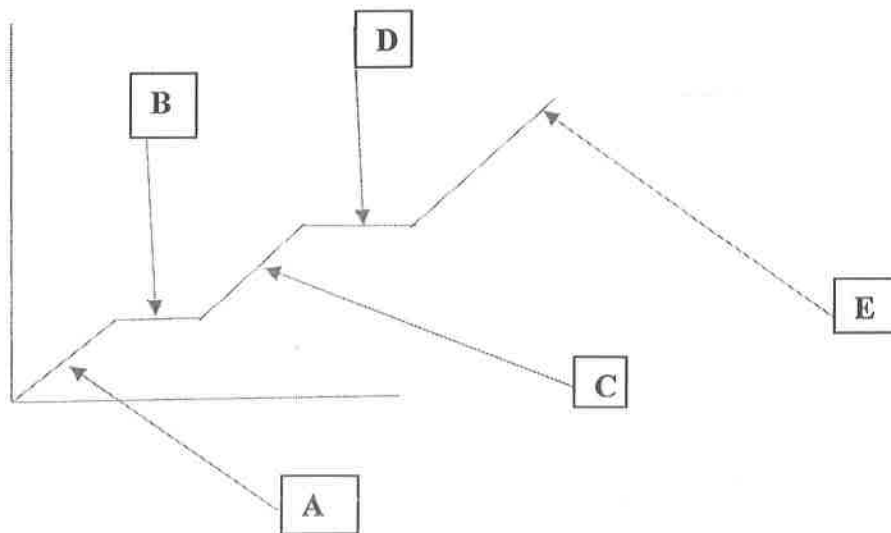
In the following graph above energy is added to a substance to see if temperature and phase changes. Please identify the following:

10.) Section **B** of the graph is identifying:

a.) liquid phase   b.) solid phase   c.) melting point

d.) freezing point   e.) both c and d   f.) evaporation/condensation

11.) After looking on your copy of the periodic table, Oxygen-16 is an example of:

a.) An element   b.) An isotope   c.) A charged ion

12.) What determines if an element is an isotope?

a.) The number of protons   b.) The number of electrons

c.) The number of neutrons   d.) The number of energy levels around the nucleus

e.) The atomic number

13.) In order to become chemically stable atoms gain, lose, or share their:

a.) Protons   b.) Electrons   c.) Neutrons   d.) Isotopes   e.) Valence electrons

14.) Which of the following below is **NOT** an example of nuclear technology:

a.) Tracers   b.) X-Rays   c.) MRI's   d.) Fission reactors   e.) Space exploration

True/False: For the below true or false statements circle/shade A on your scantron for true or circle/shade B on your scantron for false.

15.) The Lewis Dot or Electron Dot diagram draws all of the electrons within an elements energy levels with a representative dot.

16.) Absolute zero is:

a.) the point when an object has no molecular motion.   b.) -273 degrees Celsius

c.) O degrees Kelvin   d.) none of the above   e.) all of the above

17.) A factor that you change on purpose in order to test your hypothesis is the

_____.

a.) dependent variable   b.) independent variable   c.) constant variable   d.) control

18.) 409 grams equal's _____milligrams.

a.) 4.0900   b.) 409,000   c.) .40900   d.) 40,900

19.) 3.6 x 10 ⁻⁴ written in standard notation be:

a.) 36000   b.) 3600   c.) 0.0036   d.) 0.00036

Use the following sample problem to answer questions 20-21

Sample B

A student conducted an investigation to determine the effect of water temperature on the amount of sugar that dissolves in a beaker of water. Identify components for trial 1 of this investigation.

Beaker Number	Amount of Water (mL)	Temperature of Sugar (degrees C)	Temperature of Water (degrees C)	Amount of Sugar Dissolved (g)
1	100	20	5	185
2	100	20	10	189
3	100	20	15	194
4	100	20	20	204

20.) What was a constant?

   a.) Amount of water   b.) Temperature of sugar

   c.) Temperature of water   d.) both a & b

21.) What were the variables?

   a.) Amount of water   b.) Temperature of sugar

   c.) temperature of water   d.) both a & b

22.) A student measured the power of a motor operating at different temperatures. The student recorded a total of 11 measurements, one at each 2 degree interval between 10 degrees C and 30 degrees C. Which change in the procedures would most improve the <u>validity</u> of conclusions based on this investigation?

   a.) Increasing the number of variables
   b.) Decreasing the range of the independent variable
   c.) Repeating the experiment several times
   d.) Producing a graph of numerical observations

23.) In a chemical equation, _____.

a.)   Products appear before the arrow   b.) Reactants appear before the arrow

c.)   An arrow appears after the products   d.) none of the above

24.) The substances that you start with in a chemical reaction (initial substances) are called:

a.)   Products   b.) Polars   c.) Ionics   d.) Reactants

25.) On a pH scale the following are always considered to be bases:
   a.) 7-14   b.) 8-14   c.) 0-7   d.) 0-6

26.) What pH is considered to be a weak acid?

a.) 0   b.) 4   c.) 7   d.) 6

27.) What type of reaction is represented by the chemical equation?
      $2Mg + O_2 \longrightarrow 2MgO + energy$
      a.) Slow reacting   b.) acidic   c.) endothermic   d.) exothermic

28.) How many Carbon atoms are there in the chemical formula $C_6H_{12}O_6$?

a.) 6   b.) 4   c.)12   d.)9

29.) How many <u>total atoms or molecules</u> of Hydrogen are represented on the <u>reactant side</u> of the following equation: $Ca + 2H_2O \longrightarrow Ca(OH)_2 + H_2$

a.) 1   b.) 2   c.) 3   d.) 4

30.) In the following equation, $H_2SO_4 \longrightarrow H_2 + SO_4$; The $\underline{H_2SO_4}$ is:
    a.) The reactant   b.) the product
    c.) both the reactant and the product   d.) the coefficient

Use the following hypothesis to answer questions 31 –33

Hypothesis: I believe that if I test different brands of batteries to see which one would last the longest, then Duracell will have the longest average lasting time because Duracell has a copper core that conducts electricity easier.

31.) What is the independent variable stated in the hypothesis?

a.) different brands of battery   **b.)** Average lasting time

c.) cost of batteries   **d.)** Strength of batteries

32.) What is the dependent variable stated in the hypothesis?

a.) different brands of battery   **b.)** Average lasting time

c.) cost of the battery   **d.)** None of the above

33.) Which of the following would be a constant when testing this hypothesis?

a.) brand of battery   **b.)** Lasting time of batteries

c.) the device testing the battery   **d.)** The cost of the batteries

34.) 409 grams equal's _____ **milligrams.**

a.) 4.0900   b.) 409,000   c.) .40900   d.) 40,900

35.) 3.6×10^{-4} written in standard notation be:

a.) 36000   **b.)** 3600   c.) 0.0036   d.) 0.00036

36.) 22 cm = _____ **m**

a.) .022 m   b.) 2200 m   c.) .22 m   d.) 220.0 m

Name: _____ **Date:** _____ **Class Period:** _____

Part One: Identify whether the elements are metals, nonmetals, or metalloids. Also, correct write in the elements symbol as well.

Elements Name	Elements Symbol	Metal, Non-metal, or metalloid?
Beryllium		
Chlorine		
Phosphorus		
Silicon		
Sodium		

Part Two: On the periodic table please identify the following: Group Number, Period/Row Number, and specific name of each type metal or non-metal (alkali, alkaline earth, transition, noble gases).

Elements Name	Group/Family Number	Period/Row Number	Metal, Non-metal, or Metalloid	Specific type of metal or non-metal (alkali, alkaline earth, transition, noble gases).
Rubidium				
Argon				
Calcium				
Chromium				
Cobalt				
Krypton				

Part Three: Identify whether the following physical properties/characteristics goes with either a metal, non-metal, or possibly a metalloid.

Characteristic:	Metal, Non-metal, or Metalloid?
Luster	
Brittle	
Ductile	
Great conductor of electricity and heat	
Dull	
Mostly Gases	
Mostly Solids	
Semi-conductors	
Take on properties of both metals and non-metals	

Part Four: Identify the Atomic Number, Atomic Mass Unit, Atomic Mass Number, Protons, Electrons, and Neutrons for the following elements:

Elements Name	Atomic Number	Atomic Mass Unit	Atomic Mass Number	Protons	Electrons	Neutrons
Scandium						
Boron						
Iodine						
Krypton						
Platinum						
Iron						

Part Five: Radioactive elements.

1.) Elements with an atomic number of 92 and above are typically radioactive. Because of this are they stable? _____

What two processes will they go through to become more stable (one is breaking down and one is building up). Please name each process and whether that process is breaking down or building up.

    a.) _____

    b.) _____

2.) What is the biggest problem with nuclear energy? _____

Name: _____ **Date:** _____ **Class Period:** _____

What is the atomic number, mass number, number of protons, electrons, and neutrons in the following elements? Fill in the following blanks for each element.

Elements Name:	Symbol	Atomic Number	Atomic Mass Number	# of protons	# of electrons	# of neutrons
1.) Lead						
2.) _____						45
						45
3.)	Bi					
4.) Strontium						
5.) Sulfur						
6.)		63				
7.) Mendelevium						
8.)				102		
9.) Yttrium						
10.)			244			
11.) Chlorine						
12.)	Sb					
13.)	Lr					
14.)	K					
15.)		58				
16.) Nobelium						
17.) Oxygen						
18.)			252			
19.) _____						153
						153
20.)				34		
21.)					62	
22.) Rubidium						
23.)	Al					
24.) Carbon						
25.)		87				

FRENCH I

Unités 1–4   Leçons 1A–4B

EXAM I

1 **À l'écoute** Look at the four photos. You will hear various people make comments or ask questions. Select the scene that most logically goes with each comment or question. (10 × 1 pt. each = 10 pts.)

A.

B.

C.

D.

1. A	B	C	D		6. A	B	C	D
2. A	B	C	D		7. A	B	C	D
3. A	B	C	D		8. A	B	C	D
4. A	B	C	D		9. A	B	C	D
5. A	B	C	D		10. A	B	C	D

2 **Complétez** Say what these people are doing by completing each sentence with the correct form of the logical verb. (8 × 1 pt. each = 8 pts.)

1. Le week-end, mon père _____ à la maison. (travailler / bavarder)

2. Ma sœur et moi, nous _____ dans une chorale. (chanter / chercher)

3. Je/J' _____ la psychologie. (manger / étudier)

4. Tu _____ à la cantine, n'est-ce pas? (déjeuner / dépenser)

5. Florence et Nicole _____ au parc. (passer / patiner)

6. Moi, je _____ au Québec l'été (*summer*). (donner / voyager)

7. Mon colocataire et moi, nous _____ un grand appartement. (partager / oublier)

8. Vous _____ à votre examen de physique. (enseigner / échouer)

3 Comment? You have a cold and your ears are blocked up. You keep asking people to repeat what they said. Complete each question with the correct interrogative word or expression. (6 × 1 pt. each = 6 pts.)

1. —Je prends trois croissants.

   —_____ croissants prenez-vous?

2. —Ma copine Cécile danse bien.

   —_____ danse-t-elle?

3. —Mon prof de maths habite près du cinéma.

   —_____ est-ce qu'il habite?

4. —Je téléphone à Bruno.

   —_____ téléphones-tu?

5. —Mes parents sont en vacances en février.

   —_____ est-ce qu'ils sont en vacances?

6. —Il est tard. Il faut partir (*leave*).

   —_____ heure est-il?

4 Quelle heure est-il? It is six hours later in Paris than it is in New York. Write out the correct Paris time (in numbers) based on the time given for New York. Use the 12-hour clock. (6 × 2 pts. each = 12 pts.)

Modèle
À New York, il est une heure dix de l'après-midi.
À Paris, il est   **sept heures dix du soir.**

1. À New York, il est trois heures et quart du matin.

   À Paris, il est. _____

2. À New York, il est midi et demie.

   À Paris, il est _____

3. À New York, il est quatre heures vingt de l'après-midi.

   À Paris, il est _____

4. À New York, il est dix heures moins le quart du matin.

   À Paris, il est _____

5. À New York, il est deux heures trente-cinq de l'après-midi.

   À Paris, il est _____

6. À New York, il est huit heures quarante du soir.

   À Paris, il est _____

5 Expressions idiomatiques Complete each of these conversations with the correct form of être or avoir. (6 × 1 pt. each = 6 pts.)

1. —Mon frère est très jeune.
   —Ah bon? Il _____ quel âge?

2. —Nous _____ à Paris.
   —Vous aimez voyager?

3. —Où va Zaïd?
   —Il n'_____ pas avec toi?

4. —Est-ce qu'Alix et Mattéo parlent français?
   —Oui, ils _____ belges.

5. —Lilou et toi, vous gagnez (*earn*) beaucoup d'argent?
   —Oui, nous _____ de la chance.

6. —Il fait froid (*It's cold*). Je n'ai pas envie d'aller au parc.
   —Tu _____ raison. Moi non plus.

6 Les contraires Say that these brothers and sisters are not like each other by using an adjective that means nearly the opposite. (6 × 1 pt. each = 6 pts.)

Modèle

Marc est grand, mais Martine est **petite.**

1. Caroline est travailleuse, mais Léo est _____.

2. Thomas est agréable, mais Sophie et Anne sont _____.

3. Aïcha est réservée, mais Xavier est _____.

4. Abdul et Mahmoud sont ennuyeux, mais Christine et Lydia sont _____.

5. Aziz est heureux, mais Chloé est _____.

6. Karine est optimiste, mais Mélanie et Laurent sont _____.

7 Où va-t-on? Based on what these people say they feel like doing or need to do, use a form of the verb **aller** to say where they are going. (5 × 2 pts. each = 10 pts.)

1. J'ai envie de regarder un film. Je _____.

2. Nous avons envie de danser. Nous _____.

3. Tu es très malade. Tu _____.

4. Vous avez envie de nager. Vous _____.

5. Nathalie a besoin de sucre et de beurre. Elle _____.

8 Une bonne vie These people are trying to improve their lives. Complete the sentences with the correct forms of the verbs in the list. (5 x 1 pt. each = 5 pts.)

choisir	obéir
finir	réfléchir
grossir	réussir

1. Nous _____ de lire (*read*) ce livre.

2. Tu _____ beaucoup plus à tes problèmes.

3. Ma sœur _____ à mes parents.

4. Vous _____ à regarder moins de (*less*) télé.

5. Mes camarades _____ de l'eau, pas des boissons gazeuses.

9 Où est-ce? Complete each sentence with a preposition of location based on the photo. (6 × 1 pt. each = 6 pts.)

1. Où sont les affiches? Elles sont _____ le mur (*wall*).

2. Où est l'examen du fils? Il est _____ les mains (*hands*) de sa mère.

3. Où est le fils? Il est _____ sa mère.

4. Où sont les tables? Elles sont _____ la mère.

5. Où est l'affiche (*poster*) du chat noir? Elle est _____ la mère.

6. Où est l'affiche du chapeau (*hat*)? Elle est _____ l'affiche du chat noir.

10 C'est à qui? Claire and Aurélie are cleaning up after an exam study party and several items were left behind. Complete each sentence with a possessive adjective in order to identify the owner of each item. (6 × 1 pt. each = 6 pts.)

1. (à toi) C'est _____ cahier?

2. (à Justin) C'est _____ livre d'histoire?

3. (à Franck et Corinne) C'est _____ calculatrice?

4. (à moi) Ah! C'est _____ montre.

5. (à nous) C'est _____ corbeille à papier?

6. (à ton frère et toi) Ce sont _____ crayons?

11 On va où? Say where various people are going by completing each sentence with the correct form of à. (3 × 1 pt. each = 3 pts.)

1. Maman va _____ bureau le matin.

2. Le dimanche, tu vas _____ église?

3. Sandra va nager _____ piscine.

12 Au café Say what the friends are having at a café. Use the appropriate form of **prendre** or **boire**. (6 × 1 pt. each = 6 pts.)

—Qu'est-ce que tu vas (1) _____?
—Moi, j'ai faim. Je (2) _____ une pizza.
—Et comme boisson?
—Je (3) _____ toujours de l'eau minérale. Et vous deux?
—Nous (4) _____ du café.
—Qu'est-ce que vous (5) _____ à manger?
—Nous (6) _____ des sandwichs au jambon.

13 Au café You and a friend are at a café. Write a short conversation to say what each is having. Include six different partitive and indefinite articles. (6 × 1 pt. each = 6 pts.)

_____

_____

_____

_____

_____

_____

_____

_____

14 À vous! You are writing to a French pen pal. In a paragraph, describe yourself, your family, neighbors, and pet(s) if you have any. Mention how many brothers and sisters you have, their names and ages, what your parents do for work, what courses you are taking, your overall appearance, and what your personality is like. (4 pts. for vocabulary + 4 pts. for grammar + 2 pts. for style and creativity = 10 pts.)

P. 1

Nombre _____ Clase _____ Fecha _____

Gramática A   *The Verb ir*

Students may also play review games on Quia. ¡Gracias!

Level 1, pp. 120-122

> **¡AVANZA!**   **Goal:** Use the verb **ir** to say where you and others are going.

1 **¿Adónde van?** Choose the verb that best completes each sentence below.

1. ¿Adónde (va / vamos) Sandra?

2. Nosotras (vamos / van) al gimnasio.

3. ¿Cuándo (vas / van) Sergio y tú a la cafetería?

4. Tú (va / vas) a la clase de inglés los lunes y miércoles.

5. Yo (va / voy) a la biblioteca.

Students may review any vocabulary from notebooks.

2 Write three complete sentences using the information in the boxes below.

Cristina Sandra y yo Tú	ir a	la biblioteca el gimnasio la clase de arte

1. _____

2. _____

3. _____

3 Answer the following questions in complete sentences.

1. ¿Adónde vas los lunes a las 8:30 de la mañana?

_____

_____

2. ¿Adónde vas los lunes a las 3:30 de la tarde?

_____

_____

Lección 2

P. 2

Gramática B The Verb ir

> ¡AVANZA! **Goal:** Use the verb **ir** to say where you and others are going.

1 Three students are going to Spanish class. Complete the text below with words from the box.

voy	van	vamos	va

Sarita, Cristina y yo **1.** _____ a la clase de español. Lucía

también **2.** _____ a la clase de español. A mí me gusta,

pero es un poco difícil. Ustedes **3.** _____ a la clase de

español los lunes y miércoles. **4.** Yo _____ a la clase de

español los martes y jueves.

2 Write complete sentences about the following students.

1. Ana y Sandra / ir / a la cafetería.

_____

2. ¿Cuándo ir / Claudia y yo / al gimnasio?

_____

3. (Yo) / ir / a la clase de música.

_____

4. Ustedes / ir / a España / mañana por la noche.

_____

3 Complete the dialogue by answering Nora's questions

Nora: ¿Vas a la clase de inglés en la mañana o en la tarde?

Tú: _____

Nora: ¿Cuándo vas a la cafetería?

Tú: _____

Nora: ¿Adónde vas después de comer?

Tú: _____

UNIDAD 2 • Gramática B
Lección 2

p. 3

Gramática C

> **¡AVANZA!** **Goal:** Use the verb **ir** to say where you and others are going.

1 Complete the sentences with the correct form of **ir**.

1. Todos los días, yo _____ a la escuela.

2. ¿Adónde _____ Sergio y yo cuando estudiamos?

3. Yo _____ a la escuela cerca de mi casa.

4. Ustedes _____ a Colombia el miércoles.

5. ¿Adónde _____ tú a las ocho de la mañana?

2 These students are at school. Put the sentence in the correct order using the correct form of the verb **ir**.

1. Sandra y Pablo / gimnasio (ir)

   _____

2. yo / todos los días / a la escuela (ir)

   _____

3. Sandra, Sarita y yo / ¿Adónde / en la tarde? (ir)

   _____

4. todas las tardes / tú / a la biblioteca (ir)

   _____

3 Write an e-mail to one of your friends at school about plans you have with another friend. Be sure to explain where you are going.

_____

_____

_____

_____

_____

_____

15 ¿Cuándo vas a...?

Hablar

Pregúntale a otro(a) estudiante cuándo va a estos lugares. *(Ask a partner when he or she goes to these places.)*

> **A** ¿Cuándo vas a la oficina?

> **B** Voy a la oficina cuando tengo problemas.

modelo: la oficina

Estudiante **A**		Estudiante **B**
1. el gimnasio	**4.** la biblioteca	tengo (que)
2. la oficina	**5.** la cafetería	necesito
3. la escuela	**6.** la clase de...	hay
		¿ ?

Expansión
Tell the class when your partner goes to the places in the activity.

16 ¿Y tú?

**Hablar
Escribir**

Contesta las preguntas. *(Answer the questions.)* Add detail.

1. ¿A qué hora vas a la escuela?
2. ¿Cuándo van tú y tus amigos(as) a la cafetería?
3. ¿Adónde vas después de la clase de español?
4. ¿Vas mucho a la oficina del (de la) director(a)?
5. ¿Adónde vas cuando tienes que estudiar?
6. ¿Qué hay dentro de tu mochila?

¡Leer!

Comparación cultural

El autorretrato
What does a self-portrait reveal about an artist?
Mexican artist Frida Kahlo painted many self-portraits, including *Autorretrato con collar*. She was influenced by the indigenous cultures of Mexico in both her style of painting and style of clothing. She often wore traditional native clothing, as depicted in the photograph. How do you think she depicted herself in her self-portraits?

Compara con tu mundo *What would you include in a portrait of yourself and why?*

Una fotografía de Frida Kahlo (1941), Nickolas Muray

Más práctica   Cuaderno *pp. 79–81*   Cuaderno para hispanohablantes *pp. 80–83*

Frase completa! :)

Get Help Online
my.hrw.com

PARA Y PIENSA

Did you get it? Tell where the following people are going.
1. Teresa / la cafetería
2. los estudiantes / la oficina del director
3. nosotros / el gimnasio
4. yo / la clase de matemáticas

RMMS Physical Education Fitness Log

Below are the recommendations given by the US Department of Agriculture (USDA) for "ChooseMyPlate" on fitness for adolescents each day.

Children and adolescents (6-17 years)

Children and adolescents should do 60 minutes or more of physical activity each day. Most of the 60 minutes should be either moderate- or vigorous intensity aerobic physical activity, and should include vigorous-intensity physical activity at least 3 days a week. As part of their 60 or more minutes of daily physical activity, children and adolescents should include muscle-strengthening activities, like climbing, at least 3 days a week and bone-strengthening activities, like jumping, at least 3 days a week. Children and adolescents are often active in short bursts of time rather than for sustained periods of time, and these short bursts can add up to meet physical activity needs. Physical activities for children and adolescents should be developmentally appropriate, fun, and offer variety.

Source: https://www.choosemyplate.gov/resources/physical-activity-amount

Cardiovascular Examples	Muscular Strength/Endurance Examples
• go for a walk • go for a run • jump on your trampoline • ride your bike • jump rope • walk up and down your steps	• push ups • sit ups/crunches • squats • wall sits • wall jumps • lounges • wall push ups

GOOGLE CLASSROOM CODES

	Underwood	Spencer	Anderson	Glass
1A	gi4xoat	iegtggc	wefmrny	ozrnqo2
1B	hu3e7rx	64sos5e	wzprz7v	vhk75ra
2A	cpoydgu	4scrykh	hgqhg4z	pfozv27
2B	2vvhdgn	wxxj6sd	2isr72a	xremmdm
3A	o6uwkpf	6kvjke3	efqqmit	co6cjp4
3B	3wrxzqn	ewumkjc	p5u7mwa	yxcxkxu

Mrs. Underwood – sunderwood@bcps.k12.va.us   Mrs. Glass – lglass@bcps.k12.va.us

Mr. Spencer   - kspencer@bcps.k12.va.us   Mr. Anderson – swanderson@bcps.k12.va.us

RMMS Physical Education -- Fitness Log

Log your activty each day in the "activity" column. Mark your activity if it was a cardiovascular or musuclar strength/endurance activity. If the activity was cardiovascular list time spent participating in the activity. Examples listed below.

Date	Activity	Time Spent	Cardiovascular	Muscular Strength / Muscular Endurance
16-Mar	Riding My Bike	45 mins	X	
16-Mar	3 sets of 10 push ups			X

Please locate your current exploratory class and find your assignment for the next two weeks.

Teacher: **Tracey Evans**
Class: **8th Grade Introduction to Virginia Teachers for Tomorrow**
Assignment: Imagine that you have walked into your classroom on the first day of school. Four of your 30 students have Individualized Education Plans (IEPs), indicating that they have special needs. The little girl in the front row was in an automobile accident, is paralyzed from the waist down, and uses a wheelchair. The girl with the pigtails has been diagnosed with severe emotional disturbance. The little boy in the corner is dyslexic and also has ADHD. And the child with the Mickey Mouse T-shirt wears a hearing aid. The teacher must figure out a way for all of these children to have a fair chance to master the same challenging material as everyone else. Write one paragraph (5-7 sentences) that explains how you will teach these students with these various needs.

Teacher: **Tracey Evans**
Class: **8th Grade Computer Solutions**
Assignment: If students have computer access students will continue to use www.edutpying.com to practice keyboarding skills using correct posture & technique. EduTyping has to be accessed through the student's google classroom account. If students do not have computer access students will need to use the keyboarding cheat sheet to study middle, top, and bottom row keys.

Teacher: **Mr.Lawson**
Class: **Band 8**
Assignment:
- Practice a variety of scales we have learned.
- Practice infinity march.

Teacher: **Mrs. Stevens**
Class: **8th Grade Classes**
Assignment:
8th Grade 2nd Semester Class- You finished your written assignments if they were turned in and not marked as missing or incomplete. Some were beginning woodworking and some were beginning small engines. Both of these were the hands-on portion of the assignment and will not be something that you can work on at home.
Your only assignment will be a continuation of the SAE (Supervised Agricultural Experience) packet that we already turned in. During your time out of school, please record any time that you spend on an agriculture-related activity. Some of you can even mark time that you did working with plants or animals in class. Below is a shortened copy of how to keep your hours and an example of what kinds of activities that could be recorded. You can just record your hours on any piece of paper to be turned in at a later date. Your target goal is 5 hours total. This should be so easy to accomplish! If you have access to a computer, you can look up more examples, but examples are on this page as well.

8th Grade Q4 Class-You all received your pink packets and a copy of the SAE hours sheet in class on Friday. Please work on completing the SAE packet and completing the hours sheet with 5 total hours. You do not have to print the hours sheet from Google Classroom.

DATE	Description of Activity	Time Worked	Paid? (x if yes)	Comments
3-13	Walked dog	20 min	no	(10 min a.m. & p.m.)
3-14	Worked in flower bed	45 min	no	Grandma's
3-14	Started seeds for herbs	20 min	no	Basil, oregano, chives
3-15	Cleaned guinea pig cage	10 min	no	
3-15	Worked on small engine	30 min	no	
3-16	Worked on wildlife feeders	30 min		Birds, deer
3-17	Career-conservation officer	30 min	no	researched

Teacher: **Ms. Buchanan**
Class: **Art 8**
Assignment:

Things you can do while you are home:

- Graffiti Names or Tags- Do a skeleton of your name, as we did in class, with pencil on copy paper, notebook paper, or sketch paper. Bubble or block around it. Get creative with the flow of your name and add background like brick or paint splotches. Fill in with color, marker, or colored pencil, if you have these available. Add a drop shadow.

Teacher: **Mrs. Durham**
Class: **Musical Drama 8**
Assignment:

1. Define the following:
2. Drama
3. Musical
4. Script
5. Costumes
6. Staging
7. Actor
8. Character
9. Scene
10. Expression

11. Voice
12. Plot
13. Exposition
14. Transition
15. Climax
16. Resolution
17. Finale

Teacher: **Mrs. Durham**

Class: **Chorus 8**

Assignment:
- Practice All-County **Music and Spring Songs**
- March 26 Concert - Canceled
- Spring Concert - May 7, 2020 – still scheduled
- Concert will include All-County selections and spring songs
- Practice singing all selections. Document your daily practice times.
- Requires parent signature when you turn in. Stay healthy!

Teacher: **Mr. Burton**

Class: **Tech Ed 8**

Assignment: **Complete the attached worksheet.**

Career Interest Worksheet

Tech Ed

Mr. Burton

Name:_____

MYNEXTMOVE.ORG WORKSHEET

Visit mynextmove.org. On the right of the screen, click "START" under "Tell us what you like to do."

Read the O*NET Interest profiler directions. Click "NEXT" as you finish reading the directions.

Mark you interest levels on each of the 60 items.
    Record your scores here:
    R:___ I:___ A:___ S:___ E:___ C:___

List your top TWO interests. (HINT: Your top two are going to be your two highest numbers.)

o 1._____

o 2._____

 Click "NEXT" until you get to the "Explore the Job Zones" page. Click each of the 5 links to check out each level of job preparation.

Select the Job Zone that you think is right for you. Hit "NEXT" twice. You should now see a list of careers that fit your interests and preparation level.

Choose 3 careers from your list and fill in the rest of the worksheet with the information about those careers.

Once you finish with this, you may search other careers on the website.

Career #1 Name: _____
Education Level Needed for this Job:_____ Salary $$:_____
Personality Traits Needed: _____
Knowledge Needed (areas to study) _____

Career #2 Name: _____
Education Level Needed for this Job: _____ Salary $$:_____
Personality Traits Needed: _____
Knowledge Needed (areas to study!): _____

Career #3 Name: _____
Education Level Needed for this Job:_____ Salary $$:_____
Personality Traits Needed: _____
Knowledge Needed (areas to study!): _____

World Cultures 8

Nombre _____

Los Números 0-100+

Unscramble each of the following Spanish numbers and write the number beside it.

COTCEAR

DIVNETIÓS

NICE

VITNEIVEUNE

NECTOI

CONCI

CEHCOIDIO

NEITIHOCVO

ETICDEIISE

ZEID

CODE

VIETISNÉSI

CINTUENCA

SECIDIÉSI

ARNETTI

TSRE

NOU

NEITEV

TICCOINEVIN

DSO

NENTOVA

VUENE

TOANEHC

OCOH

NOEC

NEITIISETEV

CENUQI

SSEI

AETENSS

VOIENTNILU

NIAESETT

TEISE

CEETR

VEARUOIIT'TNC

CEANUTAR

URTOCA

CEVILINEDIE

NIT TIRVEIÉS

World Cultures 8

Los Números 0-100+

Find the Spanish word for each of the numbers below.

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V E I N T I S I E T E M I X D G O O X O
D I C Z S U B A V S E R T I B C N H I T
T V E R N I T S O E E D E Y N O O C A N
E I J O O N E C R C I C W I F A V O U E
D T D C E T U S T V I N C S R P E I D I
O Z N S N A A H A N E I T B Z J N T I C
T I E I T B H C U S T I V I S K T N E V
C S E R E V U E C N I A N I N J A I C E
O O O A J V V G I O I É É T J U M E I I
H O N C E E T E T L C S S C I C E V S N
C P D S Y G V G N D I H I I E U K V I T
O S E T E N T A I C O N E R T Y N F E I
S É R T I T N I E V C C O N W N A O T D
A E C N I U Q I V U R G E E T Y I V E Ó
T S Q C N P D I E C I O C H O A T E C S
N Q J I V F W N A T N E R A U C R E V Z
I S I E T E T F X D C B Z I N B E C M N
E Y K N E A C T Q U K K C S O D C J C I
R Q D A H A P D N M V X G P X M E D I V
T P H I J M M Q K A H G L F Z O K X J J
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0	5	10	15	20	25	30	80
1	6	11	16	21	26	40	90
2	7	12	17	22	27	50	100
3	8	13	18	23	28	60	100+
4	9	14	19	24	29	70	