Hello, Rising 7th Graders and Families!

Welcome to 7th Grade ELA! This summer, please complete the vocabulary and reading work described below.

Vocabulary:
Please complete *Vocabulary Workshop* A Units 10, 11, and 12, which can be found on pages 126 through 155 of your workbook. For each unit, please read the text selection, and then complete the questions for Choosing the Right Word, Synonyms, Antonyms, Completing the Sentence, and Vocabulary in Context.

In September, I will check the exercises for completion and effort.

If you were not a St. Anne's student last year, you do not have to complete this assignment.

Reading:
Please choose one of the following books to read during the summer:
The Witch of Blackbird Pond by Elizabeth George Speare
OR
My Side of the Mountain by Jean Craighead George

When you are finished reading, please complete one of the following assignments based on your book and bring it with you the first week of school:

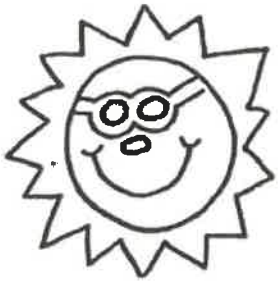
1. Imagine you are a teacher and make a 20 (or more) question quiz with answer key.
2. Make a 20-word crossword puzzle with words and definitions from and/or related to the book.
3. Create an illustrated post-card depicting a scene or character from your story. On the back, write a one-paragraph message to one of the characters.

Thank you very much! Have a wonderful summer!

Sincerely,
Mrs. Jeannine DeGeorges

Name: _____

Math Summer Work 2023
Rising 6th to 7th Grade



Hello Students!

Attached you will find a Summer Math Packet that will provide practice and enrichment reviewing important Math concepts from 6th Grade Math. In PreAlgebra in 7th Grade we will build on all of the foundational skills that you learned in 6th Grade.

I know you have been working hard with your teachers and your extremely supportive families and you are well prepared to begin PreAlgebra as you start 7th Grade. It is very important that you ask questions when you are unsure and practice using Math every day!

I do not recommend that you complete this entire packet in one sitting. I have broken it down into practice sets / topics to help guide you as you work. See the following breakdown on content area and skill sets covered on the next page. You should set a target and complete some problems each week during the course of the summer, with your goal to have the entire packet completed by the first day of school in September. Please show work where applicable so you will be able to easily check your work.

This review will help you keep your skills sharp over the summer. If you have any questions you can contact me!

Sincerely,

Mrs. Hallahan
hallahan@stannesgcschool.org

Practice Sets / Topics covered in the Summer Review

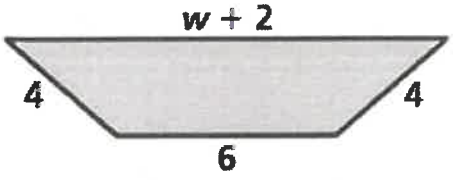
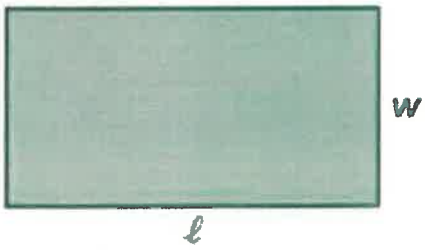
Practice Set 1: • Algebraic Expressions and Properties
Practice Set 2: • Simplifying expressions using Order of Operations
Practice Set 3: • Algebraic Equations
Practice Set 4: • Algebraic Inequalities
Practice Set 5: • Geometry; Perimeter, Area, Surface Area and Volume of Polygons and Prisms
Practice Set 6: • Statistical Measures
Practice Set 7: • Rates, Ratios and Percents
Practice Set 8: • Integers and Integer Operations • I have included at the end of this pack a review of the rules for Integer Operations to help you! ☺

Question and Work in this column:	Final Answer in this column:
Practice Set #1. Algebraic Expressions and Properties:	
Question #1: Simplify the expression. Identify the property used. $4(x - 3)$	**Answer:**
Question #2: Simplify the expression. Identify the property used. $(3 \bullet x) \bullet 7$	**Answer:**
Question #3: Simplify the expression. Identify the property used. $4(x + 3)$	**Answer:**
Question #4: Simplify the expression. Identify the property used. $(3.5 \bullet x) \bullet 4$	**Answer:**
Question #5: Identify the terms, coefficients, & constants of the expression. $5h + 9$	**Answer:**
Question #6: Identify the terms, coefficients, & constants of the expression. $a^2 + 2 + 7b$	**Answer:**

Question #7: Identify the terms, coefficients, & constants of the expression. $12 + 10c$	**Answer:**
Question #8: Identify the terms, coefficients, & constants of the expression. $g + 12 + 9g$	**Answer:**
Question #9: Write the phrase as an algebraic expression. a number x multiplied by 3	**Answer:**
Question #10: Write the phrase as an algebraic expression. 4 less than a number w	**Answer:**
Question #11: Write the phrase as an algebraic expression. a number x divided by 4	**Answer:**
Question #12: Write the phrase as an algebraic expression. 7 increased by a number w	**Answer:**
Question #13: Write the phrase as an algebraic expression. twice a number z	**Answer:**
Question #14: Evaluate the expression when: $a = 4, b = 2,$ and $c = 8$ $a + 7$	**Answer:**

Question #15: Evaluate the expression when: $a = 4, b = 2,$ and $c = 8$ bc	**Answer:**
Question #16: Evaluate the expression when: $a = 4, b = 2,$ and $c = 8$ $\frac{c}{a}$	**Answer:**
Question #17: Translate the algebraic expression into a verbal model/phrase: $14 - 3z$	**Answer:**
Question #18: Translate the algebraic expression into a verbal model/phrase: $4w$	**Answer:**
Question #19: Your friend has 5 more than twice as many game tokens as your sister. Let x be the number of game tokens your sister has. Write an algebraic expression for the number of game tokens your friend has.	**Answer:**
Question #20: Write the expression using exponents: $a \cdot a \cdot c \cdot c$	**Answer:**

Question #21: Write the expression using exponents: $4 \cdot d \cdot d \cdot d$	**Answer:**
Question #22: Tell which property the statement illustrates. $6 + (4 + x) = (6 + 4) + x$	**Answer:**
Question #23: Tell which property the statement illustrates. $3(x - 3) = 3x - 9$	**Answer:**
Question #24: Tell which property the statement illustrates. $7 \cdot m = m \cdot 7$	**Answer:**
Question #25: Simplify the expression. $3x + 9 + 2x - 5$	**Answer:**
Question #26: Simplify the expression. $3(w + 1) - 1$	**Answer:**
Question #27: Simplify the expression. $5(k + 4) - 2k$	**Answer:**

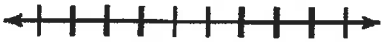
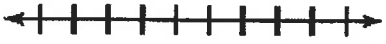
Question #28: Write and simplify an algebraic expression to represent the perimeter of the trapezoid.  	**Answer:**
Question #29: Write and simplify an algebraic expression to represent the perimeter of the square.  	**Answer:**
Question #30: Write and simplify an algebraic expression to represent the perimeter of the rectangle.  	**Answer:**
Question #31: Each day, you run on a treadmill for m minutes and lift weights for 15 minutes. Which expression can you use to find how many minutes, r, of exercise you do in 5 days? Explain your reasoning. $5(r + 15)$ $5r + 5 \cdot 15$ $5r + 15$ $r(5 + 15)$	**Answer:**

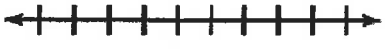
Practice Set #2. Order of Operations (PEMDAS):	
Question #32: Simplify the expression. $6 + 9 \div 3$	**Answer:**
Question #33: Simplify the expression. $5^2 - 4 \times 2$	**Answer:**
Question #34: Simplify the expression. $15 + 3(6 \div 2) - 4^2$	**Answer:**
Question #35: Simplify the expression, $7 + 3(12 \div 4) - 3^2$	**Answer:**
Question #36: Simplify the expression $\frac{3(2 + 4)}{2}$	**Answer:**
Question #37: Simplify the expression $2^3 + (8 - 4) \div 4$	**Answer:**

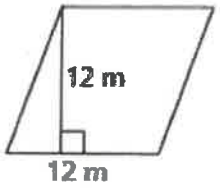
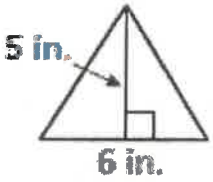
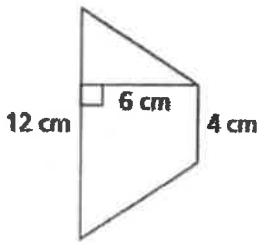
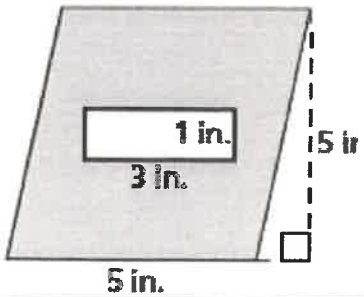
Practice Set #3, Algebraic Equations	
Question #38: Solve the Equation. Check your solution. $s + 3 = 13$	**Check:**
Question #39: Solve the Equation. Check your solution. $4c = 24$	**Check:**
Question #40: Solve the Equation. Check your solution. $\frac{3}{4}s = 12$	**Check:**
Question #41: Solve the Equation. Check your solution. $a - 6 = 13$	**Check:**
Question #42: Solve the Equation. Check your solution. $\frac{m}{2} + 6 = 10$	**Check:**

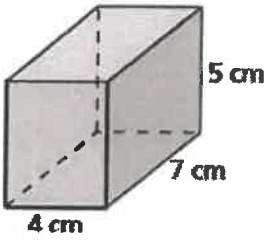
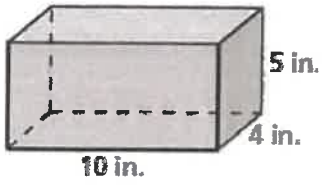
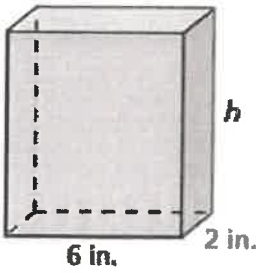
Question #43: Solve the Equation. Check your solution. $2x + 5 = 13$	**Check:**
Question #44: Solve the Equation. Check your solution. $4x - 3 = 9$	**Check:**
Question #45: Solve the Equation. Check your solution. $3(x + 2) = 15$	**Check:**
Question #46: Solve the Equation. Check your solution. $2(2x - 1) = 10$	**Check:**
Question #47: Solve the Equation. Check your solution. $3x - 2 = -8$	**Check:**

Question #48: Write the word sentence as an Algebraic Equation. And then solve your equation. Check your solution. 3 increased by a number x is 9.	**Check:**
Question #49: Write the word sentence as an Algebraic Equation. And then solve your equation. Check your solution. The product of a number y and 3 is 6.	**Check:**
Question #50: Match each Algebraic Equation with the word sentence 1. The sum of a number n and 3 is 9. 2. The product of a number n and 3 is 9. 3. The quotient of a number n and 3 is 9. 4. 9 is 3 less than a number n.	A. $\frac{n}{3} = 9$ B. $n - 3 = 9$ C. $3n = 9$ D. $n + 3 = 9$
Question #51: Solve the Equation. Check your solution. $a - \frac{3}{4} = \frac{1}{8}$ \	**Check:**

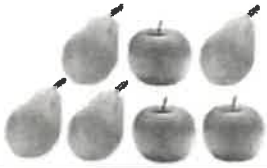
Practice Set #4, Algebraic Inequalities	
Question #52: Graph the Inequality on a number line. $b > 6$	**Graph:** 
Question #53: Graph the Inequality on a number line. $y < -1$	**Graph:** 
Question #54: Graph the Inequality on a number line. $m \leq 1$	**Graph:** 
Question #55: Write the word sentence as an Algebraic Inequality. Graph. A number n is at least 10.	**Graph:** 
Question #56: Write the word sentence as an Algebraic Inequality. Graph. 15 is more than a number x.	**Graph:** 
Question #57: Write the word sentence as an Algebraic Inequality. Graph. A number s is no more than 18.	**Graph:** 

Question #58: Write the word sentence as an Algebraic Inequality. Graph. A number b is less than 12.	**Graph:** 
Question #59: Solve the Inequality. Graph the solution. $k - 3 < 5$	**Graph:** 
Question #60: Solve the Inequality. Graph the solution. $12c \leq 72$	**Graph:** 
Question #61: Solve the Inequality. Graph the solution. $\frac{x}{4} > 5$	**Graph:** 
Question #62: A golf course charges \$10 to golf or \$150 for a summer pass. Write and solve an inequality to represent the number of times you would need to golf in order for the summer class to be a better deal. Let g = # of times you golf. Graph your solution set on a number line.	**Graph:** 

Practice Set #5, Polygons, Prisms, Area, Volume	
Question #63: **Find the area of the parallelogram.**  	**Answer:**
Question #64: **Find the area of the triangle.**  	**Answer:**
Question #65: **Find the area of the trapezoid.**  	**Answer:**
Question #66: **Find the area of the shaded region.**  	**Answer:**

Question #67: Which description represents the area of a parallelogram? **A.** the product of the length and the height **B.** the sum of all of the side lengths **C.** the square of the side length **D.** four times the length	**Answer:**
Question #68: **Find the surface area of the prism.**  	**Answer:**
Question #69: **Find the volume of the prism.**  	**Answer:**
Question #70: Write and solve an equation to find the missing dimension of the prism. Volume = 84 in.^{3}  	**Answer:**

Practice Set #6. Statistical Measures	
Question #71: Determine the Mean for the given data set: 12, 12, 10, 8, 9, 9, 9, 11, 11, 8	**Answer:**
Question #72: Determine the Median for the given data set: 12, 12, 10, 8, 9, 9, 9, 11, 11, 8	**Answer:**
Question #73: Determine the Mode for the given data set: 12, 12, 10, 8, 9, 9, 9, 11, 11, 8	**Answer:**
Question #74: Determine the Range for the given data set: 12, 12, 10, 8, 9, 9, 9, 11, 11, 8	**Answer:**
Question #75: Determine whether each question is a statistical question. Explain. 1. How many hours do sixth-grade students sleep per night? 2. How many countries are in North America?	**Answer:**

Practice Set #7, Rates, Ratios and Percents:	
Question #75: **Write the ratio. Explain what the ratio means.** apples to pears 	**Answer:**
Question #76: **Find the missing values in the ratio table.** **Pencils** 6 18 ___ **Erasers** 2 ___ 22	**Answer:**
Question #77: **Write a unit rate for the situation.** 1200 calories in 3 liters	**Answer:**
Question #78: **Determine which is the better buy.** **Beef** A B **Cost (dollars)** 7.38 9.57 **Pounds** 2 3	**Answer:**
Question #79: Write each fraction as a percent. $\frac{7}{8}$ $\frac{13}{20}$	**Answer:**
Question #80: Find the percent of the number. 20% of 90	**Answer:**

Practice Set #8. Integers and Integer Operations:	
Question #81: **Find the absolute value.** 1. $\lvert 8 \rvert$ 2. $\lvert -3 \rvert$	**Answer:**
Question #82: **Complete the statement using <, >, or =.** 3. $4 \_\_\_ \lvert -8 \rvert$ 4. $\lvert -5 \rvert \_\_\_ \lvert -10 \rvert$	**Answer:**
Question #83: **Evaluate the expression.** $-12 + 5$	**Answer:**
Question #84: **Evaluate the expression.** $4 + (-2)$	**Answer:**
Question #85: **Evaluate the expression.** $-3 + (-7)$	**Answer:**
Question #88: **Evaluate the expression.** $-4 - 3$	**Answer:**
Question #87: **Evaluate the expression.** $9 - (-2)$	**Answer:**

Question #88: **Evaluate the expression.** $-3-(-7)$	**Answer:**
Question #89: A scuba diver dives down 20 feet into the ocean. He then swims 11 feet back up towards the surface. What is the position of the scuba diver relative to the surface?	**Answer:**
Question #90: You and your friend play a video game. You have a final score of 40 points, and your friend has a final score of -21 points. By how many points did you win?	**Answer:**
Question #91: **Evaluate the expression.** $-36 \div 4$	**Answer:**
Question #92: **Evaluate the expression.** $72 \div 8$	**Answer:**
Question #93: **Evaluate the expression.** $-5 \bullet 16$	**Answer:**

Question #94: **Evaluate the expression.** $-13(-9)$	**Answer:**
Question #95: **Evaluate the expression.** $\frac{48}{-12}$	**Answer:**
Question #96: You lose 2 points every time you forget to write your name on a test. You have forgotten to write your name 4 times. What integer represents your change in points from forgetting to write your name?	**Answer:**
Question #97: The temperature falls from 3°C to −4°C. What is the difference in these temperatures?	**Answer:**
Question #98: Which set of numbers is ordered from least to greatest? 5, −15, 7, −13, 1 −21, −34, −37, −52, −56 −3, −1, 0, 1, 3	**Answer:**

Question #99/100:

The table shows the temperature in Des Moines, Iowa, for certain times during a particular day.

Time	3 A.M.	8 A.M.	1 P.M.	5 P.M.	10 P.M.
Temperature	−15°F	−6°F	22°F	10°F	−11°F

a. What are the high and low temperatures?

b. Find the range of temperatures.

c. Find the change in temperature from 5 P.M. to 10 P.M.

d. Based on the given five temperatures, what is the average temperature for the day?

Answer:

See the Rules of Integer Operations on the last page to help you on the last set!

☺ Remember, email me and reach out if you need help!

hallahan@stmetgeschool.org

Rules for Integers

Adding Integers

Rule: If the signs are the same, add and keep the same sign.

(+) + (+) = add the numbers and the answer is positive

(-) + (-) = add the numbers and the answer is negative

Rule: If the signs are different, subtract the numbers and use the sign of the larger number.

(+) + (-) = subtract the numbers and take the sign of the bigger number

(-) + (+) = subtract the numbers and take the sign of the bigger number

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Subtracting Integers "Same/Change/Change (SCC)"

Rule: The sign of the first number stays the same, change subtraction to addition and change the sign of the second number. Once you have applied this rule, follow the rules for adding integers.

(+) − (+) = (+)+(-) SCC, then subtract, take the sign of the bigger number

(-) − (-) = (-) + (+) SCC, then subtract, take the sign of the bigger number

(+) − (-) = (+) + (+) SCC, then add, answer is positive

(-) − (+) = (-) + (-) SCC, then add, answer is negative

Multiplying and Dividing Integers

Rule: If the signs are the same, multiply or divide and the answer is always positive.

(+) x (+) = + (+) divided by (+) = +

(-) x (-) = + (-) divided by (-) = +

Rule: If the signs are different, multiply or divide and the answer is always negative.

(+) x (-) = - (+) divided by (-) = -

(-) x (+) = - (-) divided by (+) = -