



Holiday Review Packet

Name: _____

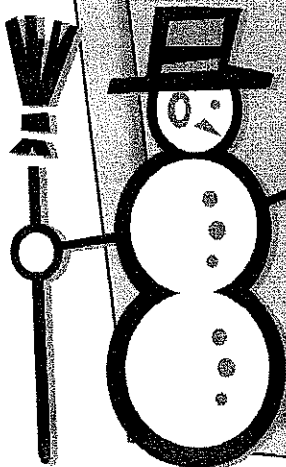
Class: _____

Dear Scholars,

The attached packet covers all the standards that you will be tested on for Interim 2. Interim 2 is on January 8th. This packet must be completed over the break. It is going to count as a quiz grade. Please make sure you show all your work. Part of your assignment is to have your parent/guardian look over your work and sign on the bottom of this page. To answer these questions, please use of the resources that I haven given to you, such as your class notes, the packets that I have created each an everyday, your homework and the internet. An additional tool to use is <https://www.khanacademy.org/>. This packet must be completed and signed by a parent/guardian by **Wednesday January 3rd**. Please do not leave anything blank because you have many resources that can help you complete this assignment. Do not forget to show all your work. If you need extra space, please feel free to use loose-leaf paper and label the questions and attach your work to the packet before handing it in. Have a wonderful break and see you when we come back!

Best,
Ms. Napolitano and Ms. Frost

X _____
Parent/Guardian Signature



THE NUMBER SYSTEM (6.NS.1)

Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.

1. A sandbox has an area of 32 square feet, and the length is $4\frac{1}{2}$ feet. What is the width of the sand box?

2. Shayla has $6\frac{1}{2}$ pounds of potato salad into containers each of which holds $1\frac{5}{8}$ pounds. How many containers does she need?

3. The area of a rectangular city park is $\frac{15}{56}$ square miles. The width of the park is $\frac{3}{7}$ mile. What is the length, in miles, of the park?

4. One serving of Chad's favorite cereal contains $1\frac{1}{4}$ ounces. How many servings are in a $15\frac{1}{3}$ -ounce box?

5. Jasmine has $3\frac{3}{8}$ pounds of turkey meat. She is making $\frac{1}{3}$ -pound turkey burgers. Does Jasmine have enough meat to make 12 turkey burgers? Explain.

THE NUMBER SYSTEM (6.NS.2)

Fluently divide multi-digit numbers using the standard algorithm.

<p>1. Sandrena and her friends bought frozen yogurt for 55 cents per ounce. Their total was \$10.45. How many ounces did they buy?</p>	<p>2. A local museum had a total of 38,627 visitors last year. The museum was open every day except for four holidays. On average how many visitors did the museum have each day?</p>
<p>3. Nigel has 2,835 comic books. He must pack them into boxes to ship to a comic book store. Each box holds 45 comic books. How many boxes will he need to pack all of the books?</p>	<p>4. Divide.</p> <p>5,715 ÷ 84</p>
<p>5. During a promotional weekend, a clothing store gives a \$50 gift card to every 75th person who enters the store. On Saturday, there were 1,032 people who visited the store. On Sunday, there were 1,562 people who visited the store. How many people received a \$50 gift card over the two days?</p>	

THE NUMBER SYSTEM (6.NS.3)

Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

<p>1. Sandy connects a black garden hose and a green garden hose to make one long hose. The black hose is 18.5 feet. The green hose is 12.65 feet. How long is the combined hose?</p>	<p>2. Judy earns \$11.80 per hour working at a fast food restaurant. How much money will she earn for 12.5 hours of work?</p>
<p>3. Nina has \$20.14 in her purse. She buys lunch for \$9.67. How much does she have left?</p>	<p>4. Mr. Williams has a piece of rope that is 22.5 meters long. He wants to cut it into pieces that are 1.25 meter long. How many pieces of rope will he have?</p>
<p>5. Jamal bought 2 pounds of red apples and 3.2 pounds of green apples from a grocery store, where both kinds of apples are \$1.65 a pound. How much did Jamal spend on apples?</p>	

THE NUMBER SYSTEM (6.NS.4)

Find the greatest common factor of two whole numbers...and the least common multiple of two whole numbers...Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.

<p>1. Find the LCM and GCF of 12 and 15.</p>	<p>2. Find the GCF from the two numbers, and rewrite the sum using the distributive property.</p> $24 + 36$
<p>3. Room A and B were both cleaned today.</p> <ul style="list-style-type: none"> • Room A is cleaned every 9 days. • Room B is cleaned every 6 days. <p>What is the fewest number of days that will pass before both rooms are cleaned again on the same day?</p>	<p>4. There are 27 girls and 36 boys who want to participate in a math competition. If each team must have the same ratio of girls and boys, what is the greatest number of teams that can enter?</p>
<p>5. Beverly is buying hot dogs and hot dog buns for a picnic. She wants to buy one hot dog for each bun with none left over. The hot dogs come packed 12 in a package. The buns come packed 8 in a package. What is the least amount of each Beverly needs to buy? How many packages of each item would Beverly have to buy?</p>	

THE NUMBER SYSTEM (6.NS.5)

Understand that positive and negative numbers are used together to describe quantities having opposite directions or values.

1. The elevation of a sea is about 510 feet below sea level. What integer represents this elevation?

2. The table shows the low temperature for several days. Which day was the coldest?

Day	Temperature(°F)
Monday	-3
Tuesday	0
Wednesday	-1
Thursday	4
Friday	3

3. The table shows the golf scores of several players. Which pairs of points represent opposites?

Player	Sam	Tom	George	Ingrid	Mary
Score	-4	9	-6	7	6

4. What integer represents "a credit of \$35" if zero represents the original balance?

5. Below is a list of numbers in order from least to greatest. Use what you know about the number line to complete the list of numbers by filling in the blanks with the missing integers.

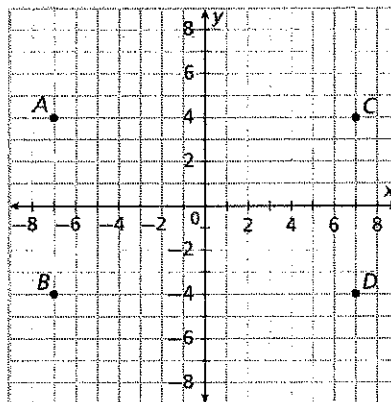
-5, _____, -3, -2, -1, _____, 1, 2, _____, 4, _____

THE NUMBER SYSTEM (6.NS.6)

Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.

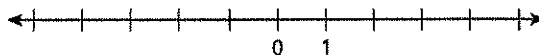
1. Both coordinates of a point in the coordinate plane are negative. In which quadrant is this point located?

2. Which of the points on the coordinate plane has coordinates $(7, -4)$?



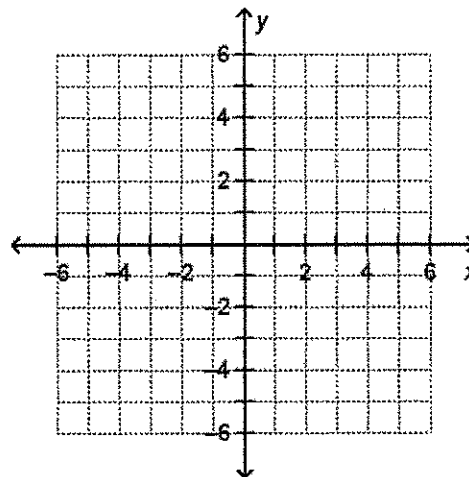
3. What is the opposite of the opposite of -5?

4. Graph the integers -1, 4, 2, and their opposites on the number line.



5. The coordinate plane represents a map of Leonardo and Christie's town. Graph and label each location on the coordinate plane.

Home: $(-4, 2)$
 Coffee shop: $(3, 2)$
 School: $(4, -5)$
 Arcade: $(-2, 0)$



THE NUMBER SYSTEM (6.NS.7)

Understand ordering and absolute value of rational numbers.

1. Write the numbers in order from least to greatest.

$-2, -5, -9, 2.2, 2.7, -20, 2.5$

2. What is the absolute value of 34?

3. At a golf tournament, Tyrese scored +6, Whitney scored -16, and Maxwell scored -4. One of these three players was the winner of the tournament. Who won the tournament? The winner will be the player with the lowest score.

4. On January 25th, the high temperature in Portland, Oregon, was 48 °F. On February 2nd, the high temperature was 24 °F. Which day was warmer?

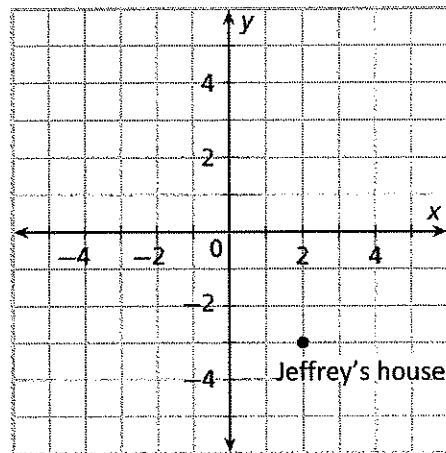
5. Which costs more, a hamburger or chicken salad? Use the given prices to write an inequality that shows your answer.

Hamburger	\$4.30
Hot Dog	\$2.35
Chicken Salad	\$4.49
Pizza	\$2.49

THE NUMBER SYSTEM (6.NS.8)

Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. The coordinates of the vertices of a rectangle are $(-1, 4)$, $(5, 4)$, $(5, -3)$, and $(-1, -3)$. What are the dimensions of the rectangle?</p> | <p>2. The point $(-3, -3)$ is reflected across the x-axis. What are the coordinates of the new point?</p> |
| <p>3. The coordinates of point A are $(-5, 6)$. The coordinates of point B are $(2, 6)$. Find the length of the line segments with end points A and B.</p> | <p>4. The coordinates of point C are $(0, -2)$. The coordinates of point D are $(0, 9)$. Find the length of the line segments with end points C and D.</p> |
5. Jeffrey's walks to the library every day after school. The library is located at $(-5, -3)$ on the map. Graph and label this point. Each unit on the coordinate plane represents 1 block. What is the distance from Jeffrey's house to the library in blocks?



EXPRESSIONS AND EQUATIONS (6.EE.1)

Write and evaluate numerical expressions involving whole-number exponents.

<p>1. Evaluate:</p> <p>$5^3 + 6 \times 3$</p>	<p>2. Amber sends a text message to 4 people and those 4 people send the text message to 4 more people, and so on. Write an expression to show the number of people who will receive the text message after the fifth round.</p>
<p>3. $(35+20) \div 5 + 3^2$</p>	<p>4. Write the expression $7 \times 7 \times 7 \times 7 \times 7 \times 7$ in exponential form.</p>
<p>5. Consider the expression: $(32 \div 4) \cdot 2 - 6 + 3^2$. Explain the order of operations you would use to simplify this expression. Then simplify it.</p>	

EXPRESSIONS AND EQUATIONS (6.EE. 2)

Write, read, and evaluate expressions in which letters stand for numbers.

1. Which expression represents the phrase below?

7 less than the product of 4 and a number, x

2. What is the value of the expression below when $c = 5$ and $d = 4$?

$$5c^2 - 4d + 7$$

3. The distance from Hailey's house to the shopping center is 2.5 miles more than the distance from Hailey's house to the movie theater. Let m equal the distance from Hailey's house to the movie theater. Write an expression to represent the distance from Hailey's house to the shopping center.

4. The new post office has an area that is 3.9 times the area of the old post office. Let p represent the area of the old post office. Write an expression to represent the area of the new post office?

5. The table shows the time Mr. Levy spent tutoring two of his students and how much he was paid. Write an expression to show how much Mr. Levy will earn in h hours. How many hours must Mr. Levy tutor to earn \$48? Justify your answer.

Mr. Levy's Tutoring		
	Hours	Pay
Carlene	4	\$32
Albert	7	\$56

EXPRESSIONS AND EQUATIONS (6.EE.3)

Apply the properties of operations to generate equivalent expressions.

<p>1. Which expression is equivalent to $2(5m) + m$?</p> <p>a) $11m$ b) $12m$ c) $5m + 2$ d) $7m + 2m$</p>	<p>2. Which expression is equivalent to $4x - 3y + x + x + x$?</p> <p>a) $7x$ b) $4x$ c) $6x - 3y$ d) $7x - 3y$</p>
<p>3. The rent for an apartment is \$900 per month. The landlord charges one month's rent as a deposit plus a nonrefundable damage cost of \$450. The expression $900(n + 1) + 450$ represents the cost of the renting the apartment for n months. Simplify the expression.</p>	<p>4. A square has a perimeter given by the expression $16x + 32y$. Write an expression for the length of one side of the square.</p>
<p>5. Whenever Sabrina visits the gym she lifts weights for 8 minutes and runs on the treadmill for 35 minutes. Write two equivalent expressions and find the total minutes that Sabrina exercise for 5 days.</p>	

EXPRESSIONS AND EQUATIONS (6.EE. 4)

Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).

<p>1. Which pair of expressions is equivalent?</p> <p>a) $6(8x)$ and $14x$ b) $6(8x)$ and $48x$ c) $6x + 8x$ and $14x^2$ d) $6x + 8x$ and $48x$</p>	<p>2. Select all of the expressions that have $5x + 4y$ as one of their factors.</p> <p>a) $15x + 12y$ b) $3x + y + 2x + 2y$ c) $8x + y + 2x + 7y$ d) $25x + 16y$</p>
<p>3. Which expression does not equal 18?</p> <p>a) $3k$ for $k = 6$ b) $3 + k$ for $k = 15$ c) $\frac{k}{3}$ for $k = 6$ d) $k - 10$ for $k = 28$</p>	<p>4. Dana's Custom Necklaces charges x dollars to make a custom necklace, y dollars to ship the necklace, and \$8 to insure the necklace. The expression $4x + 4y + 32 + x + y$ represents the total cost of making, shipping, and insuring 4 necklaces, and making and shipping 1 necklace without insurance. Write the expression in simplified form.</p>
<p>5. Ms. McLean wrote the expression below on the chalkboard for her class. She asked the students to write an equivalent expression using no more than one set of parentheses.</p> $5(4x + 6y + 4z) + 4(x - 2z)$ <ul style="list-style-type: none">• Simone wrote $20x + 30y + 20z$• Lennox wrote $6(4x + 5y + 2z)$• Daniele wrote $8x + 6y + 2z$ <p>Which, if any, of the three students wrote an expression that is equivalent to Ms. Mclean's expression?</p>	

