

Name \_\_\_\_\_

### Rising Grade 7 Summer Math

Please email me at [kcarrier@broadwateracademy.org](mailto:kcarrier@broadwateracademy.org) if you have any questions and I will be happy to help. Nothing in this packet is new information, we have covered everything throughout fifth and sixth grade. Use your book or the internet as a resource to help if you get stuck.

Use order of operations to simplify the following problems. You may use a calculator, but show all the steps needed to simplify. Please review negative integer rules if needed.

$$5 + (-3) \cdot 7 =$$

$$(-4 - 2)(12 - 15) =$$

$$7^2 - 4 \times 6 + 2 =$$

$$\frac{5^3 - 5^2}{(-10) + 20} =$$

$$9 + (-7) - 2 - (-6) =$$

$$\frac{(6-2)^3}{4^2 \cdot 2 \cdot 2} =$$

Combine the like terms in the following problems.

$$4w + 2y + 8w + 3y$$

$$7bh - 2hb + 12$$

$$11m - 3m^2 + 7m$$

$$g - 4h + 2g^3 - 2h + 3g$$

The following problems require one step to find the value of the variable. Remember to use inverse operations to solve these problems.

$$j - 8 = 21$$

$$6r = 126$$

$$2 + k = 13$$

$$\frac{m}{8} = 5$$

$$-7d = -49$$

$$p - (-9) = 11$$

The following problems require two steps to find the value of the variable. Remember to use inverse operations to solve these problems.

$$4k - 3 = 25$$

$$9 - 2q = 13$$

$$\frac{y+10}{2} = 15$$

$$-5v + 3^2 = 54$$

$$\frac{1}{2}m - 11 = 43$$

$$\frac{2}{3}p + (-4) = 20$$

Reorder this number set from smallest to largest.

$$9, \frac{14}{3}, -7, 2^5, -0.09, \frac{-15}{3}, 0.1, \frac{3}{4}, -2^3$$

Add, subtract, multiply, or divide the following problems. Show all work.

$$2\frac{3}{4} + 5\frac{2}{7} =$$

$$4\frac{1}{3} - \frac{3}{8} =$$

$$7\frac{2}{4} \cdot 2\frac{4}{5} =$$

$$5\frac{4}{12} \div 2\frac{4}{6} =$$

There are five apples in a pack. If all apples weigh  $6\frac{2}{3}$  pounds together, how much does one apple weigh if they all weigh the same amount?

The pizza restaurant starts each day with 40 pounds of dough. If each pizza requires  $\frac{5}{15}$  of a pound of dough. What is the largest number of pizzas they could make?

Mike is following a secret family soup recipe. He needs  $\frac{5}{6}$  of a cup of boiled skunk,  $3\frac{1}{4}$  of a cup of jelly beans, and  $\frac{17}{8}$  of a cup of soda. How many total cups of ingredients does Mike need?

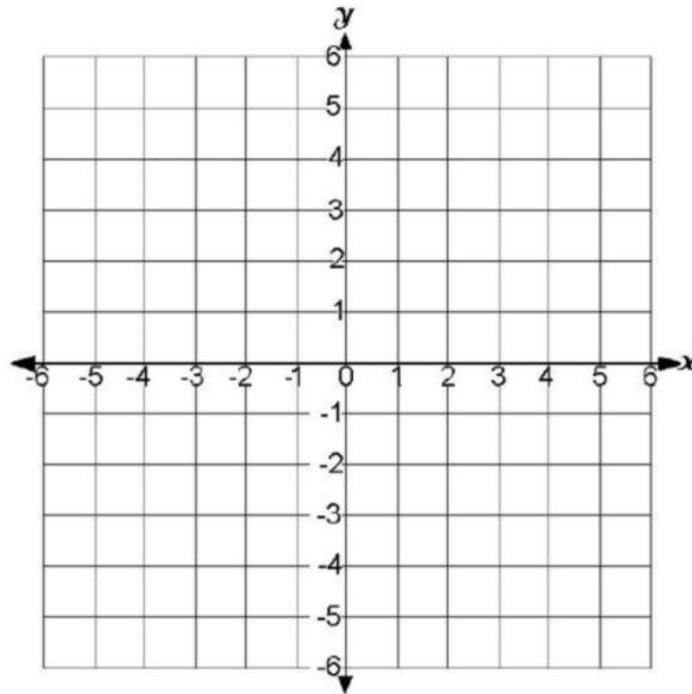
Place and label the ordered pairs on the coordinate grid. Remember the x-coordinate is the first number and y-coordinate is the second number,  $(x,y)$ .

Point A  $(2,3)$

Point B  $(-4,1)$

Point C  $(3,-1)$

Point D  $(-1,-5)$



State what quadrant each ordered pair would fall in on a coordinate plane.

$(x,y)$ :

$(x,-y)$ :

$(-x,-y)$ :

$(-x,y)$ :

In your own words, explain how graphing data helps people share and explain information with each other. Minimum five sentences.