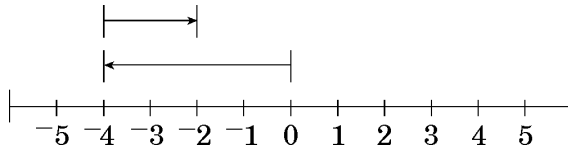# Outgoing 7th Grade Summer Assignment

Name: _____   **Date:** _____
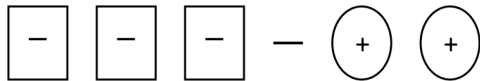
1. Which number sentence below models the problem shown on the number line?

   A. $-2 + -4$ B. $-5 + 3$

   C. $5 + -3$ D. $-4 + 2$
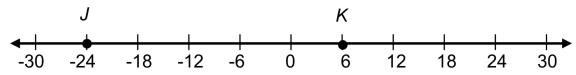
2. Which expression matches the model shown?

   A. $-2 + 3$ B. $3 + 2$

   C. $-3 - 2$ D. $2 - 3$

3. Which expression matches the model shown?

   A. $4 + (-3)$ B. $-4 + (-3$

   C. $-3 - 4$ D. $3 - (-4)$

4. Look at points J and K on the number line.

   Which expression represents the distance between points J and K on the number line?

   A. $-24 + 6$ B. $-24 + 30$

   C. $6 - (-24)$ D. $6 - (6 + 24)$

5. Add on a number line: You have $4 and you need to pay a friend $3. What will you have after paying your friend?

6. Which of the following equations is modeled by the counters shown below, if the shaded circles represent negative and the unshaded circles represent positive?
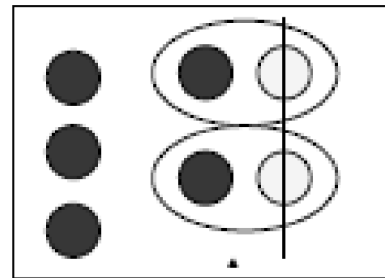
   A. $3 - 8 = -5$ B. $-3 - 2 = -5$

   C. $1 - (-4) = 5$ D. $3 - (-2) = 5$

7. Simplify this expression: $\dfrac{(56 \div 14) - 3(-2 + 6)}{4^2}$

    A. $-\frac{1}{2}$ B. $\frac{1}{2}$ C. 2   D. -1

8. Evaluate:

    $7^2 - 24 \div 3 + 26$

9. What is the value of the expression below?
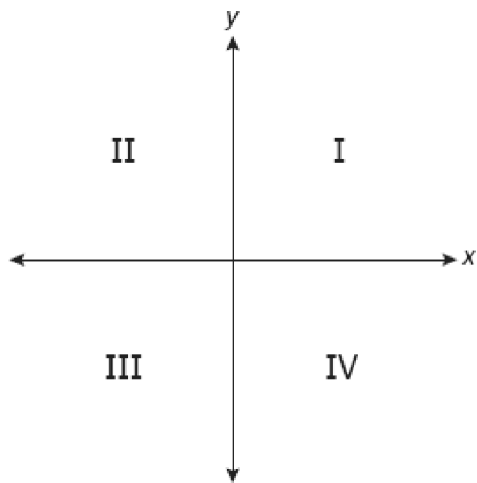
    $(7 - 4)^2$

10. Simplify the expression below.

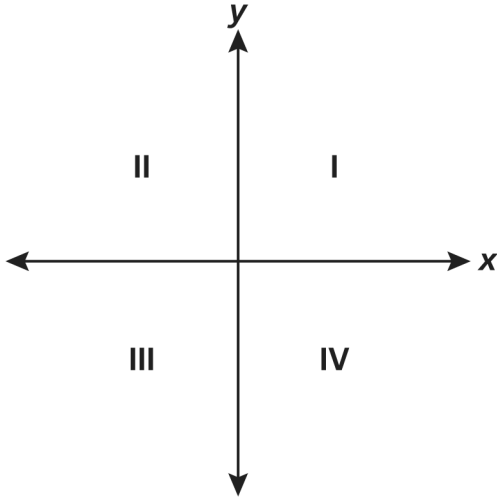$$\dfrac{24 - (3 + 1) \cdot 4}{20 - 2^4}$$

    A. $\dfrac{3}{4}$ B. $\dfrac{7}{6}$ C. 2   D. 20

11. In which quadrant on the coordinate plane would an ordered pair be graphed when the first coordinate is positive and the second coordinate is negative $(+, -)$?

    A. I   B. II   C. III   D. IV

12. Let (x, y) represent an ordered pair on the following coordinate plane.

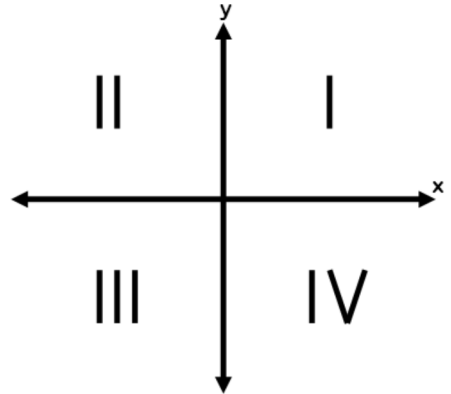In which quadrants are x and y either both negative numbers or both positive numbers?

A. I and II   B. I and III

C. I and IV   D. II and III

13. Kristopher has to plot the following set of ordered pairs in the coordinate plane below.

$\{(2, 5)\ (-3, 5)\ (8, 9)\ (-2, -7)\ (6, 1)\ (5, -3)\ (-4, -1)\ (9, -7)\ (1,$

Which two quadrants will contain the same number of points?

A. I and II   B. II and III

C. II and IV   D. III and IV

14. Give the unit rate of the following:

If 15 lbs. of chicken cost $56.85, what is the cost of one pound?

15. Cory sold 6 baseball cards to a collector for a total of $90. He sold each card for the same price. What is the unit rate for Cory's baseball cards?

A. $6 per card   B. $15 per card

C. $30 per card   D. $84 per card

7th Grade Summer Assignment

16. Jazzi rode her bike at a constant rate for 9 hours. The table below shows how many hours she biked and how many calories she burned.
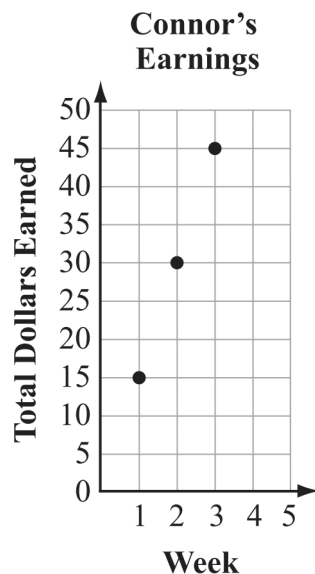
Jazzi's Bike Ride

Hours	Calories Burned
2	460
5	1,150
6	1,380
8	1,840
9	2,070

How many calories did Jazzi burn per hour?
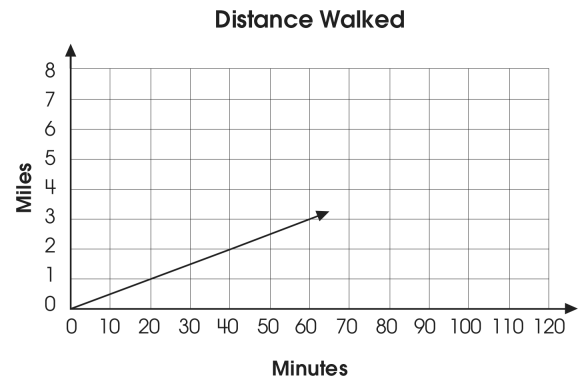
A. 230   B. 690   C. 1,150   D. 1,380

17. The graph below shows how much Connor earns each week.

Connor's Earnings

The pattern continues. How much will Connor have earned after his eleventh week?

A. $60   B. $165   C. $180   D. $330

18. Mary recorded the number of miles she walked in 60 minutes, as shown in the graph.

Distance Walked

The next day, Mary walked for 100 minutes at the same speed.

How many miles did she walk the next day?

A. 4 miles   B. 5 miles

C. 6 miles   D. 7 miles

19. Alan wants to bring 12 cupcakes to his class party. He can buy cupcakes at the bakeries listed below:

- Sunrise Bakery sells 3 cupcakes for $1.80
- Quality Bakery sells 4 cupcakes for $2.20
- Tasty Bakery sells 6 cupcakes for $3.00

To spend the least amount of money, Alan needs to know how much one cupcake costs at *each* bakery. What is the cost per cupcake at *each* bakery? Show your work and write your answers in the box below.

Cost per cupcake at Sunrise Bakery: $ _____

Cost per cupcake at Quality Bakery: $ _____

Cost per cupcake at Tasty Bakery: $ _____

20. **Shonee's Bicycle Trip**

Shonee took a trip on her bicycle. The table below shows the total distance Shonee traveled at 20-minute intervals.

Time (minutes)	Distance (kilometers)
0	0
20	5
40	20
60	25
80	25
100	30

a) On a grid, construct a graph to represent Shonee's bicycle trip. Be sure to label your axes.

b) What was Shonee's average speed in kilometers per hour? Show your work or explain how you found your answer.