6th to 7th Grade Summer Math Packet

Student _____

Instructions

Please complete this packet over the summer. Answers should be recorded on this packet or a seperate paper.**Work is required for credit.**

1. **Complete the steps to find the quotient of** $492 \div 6$.

Label the appropriate boxes with the correct letter placement for the problem below.

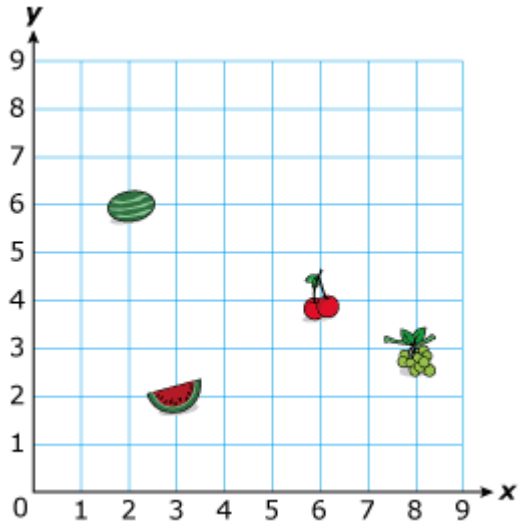
300	200	92
82	50	42
30	12	6

Step 1. (**A** **÷ 6) + (180 ÷ 6) + (** **B** **÷ 6)**

Step 2. **C** **+ 30 + 2**

Quotient **D**

2. Rita placed some fruit stickers on a grid as shown below.



At which coordinates did she place the sticker that resembled cherries?

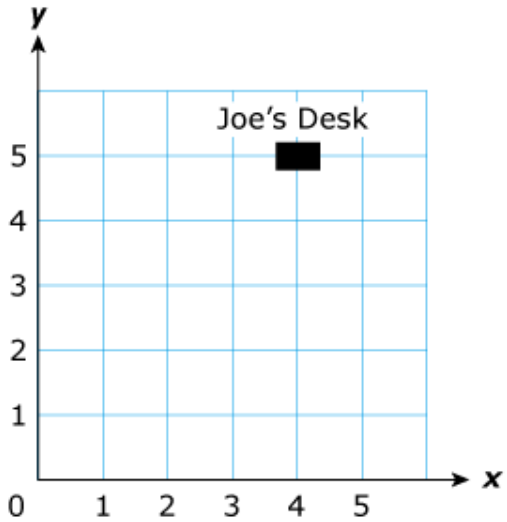
A. (8, 3)

B. (6, 4)

C. (7, 4)

D. (4, 6)

3. Joe used a grid to plot the location of the desk in his office as shown below.



Which appear to be the coordinates of the location of Joe's desk?

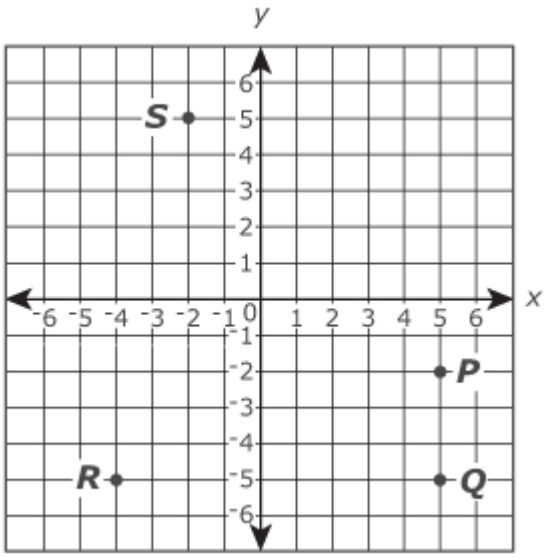
A. (4, 5)

B. (5, 5)

C. (4, 4)

D. (5, 4)

4. Use this coordinate plane to answer the question.



Which ordered pair gives the coordinates for point *R*?

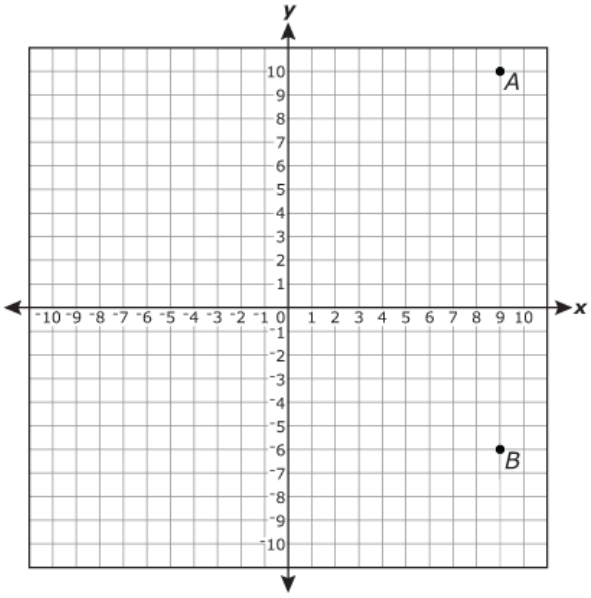
A. (–5, –4)

B. (5, –4)

C. (–4, 5)

D. (–4, –5)

5. Point *A* and Point *B* are graphed on the coordinate grid below.



What is the distance between Point *A* and Point *B*?

A. 4 units

B. 6 units

C. 10 units

D. 16 units

6. Solve $\frac{1}{4} + \frac{5}{8}$

A. $\frac{6}{12}$

B. $\frac{7}{8}$

C. $\frac{6}{32}$

D. $\frac{1}{2}$

7. Solve.

$1\frac{4}{9} - \frac{2}{3}$

A. $\frac{7}{9}$

B. $\frac{8}{9}$

C. $1\frac{2}{6}$

D. $1\frac{5}{6}$

8. What is the product of $\frac{5}{8} \times \frac{3}{4}$?

A. $\frac{8}{32}$

B. $\frac{15}{32}$

C. $\frac{8}{12}$

D. $\frac{15}{12}$

9. What is the value of the expression below?

$$\frac{1}{4} \div 8$$

A. $\frac{1}{32}$

B. $\frac{1}{2}$

C. 2

D. 32

10. Label the boxes in order from greatest(1) to least (4)using the numbers 1, 2, 3 and 4.

$\frac{5}{4} \times 15$	$\frac{4}{3} \times 10$	$\frac{2}{3} \times 15$
$\frac{3}{2} \times 10$		

11. Which expressions represent the sum of 4 and y?

A. 4 + y

B. 4y

C. y + y + y + y

D. y^4

12. Circle all expressions are equal to 3x + 4y?

5x + 2y -2x +2y	4x + 3y	4y + 3x
x + x + x + y + y + y + y	3x + x + 3y + y	

13. A punch recipe requires 2 cups of cranberry juice to make 3 gallons of punch. Using the same recipe, what is the amount of cranberry juice needed for 1 gallon of punch?

A. 3 cups

B. $1\frac{1}{2}$ cups

C. 1 cup

D. $\frac{2}{3}$ cup

14. Kara needs 15 apples to make 2 pies. She made this table to show how many apples she would need for different numbers of pies.

Apples in Pies

Number of Apples	15	30	45	60		
Number of Pies	2	4	6	8	10	12

At this rate, how many apples will Kara need to make 12 pies?

A. 25

B. 75

C. 90

D. 120

15. A recipe calls for 2 cups of flour and 1 cup of milk. What is the ratio of milk to flour in this recipe?

A. $\frac{1}{2}$

B. $\frac{2}{3}$

C. $\frac{3}{2}$

D. $\frac{2}{1}$

16. Amy received $51 for selling 68 candy bars for a school fundraiser. At what rate was Amy selling each candy bar?

A. $.75

B. $.78

C. $1.33

D. $1.70

17. A group of students organized a car wash to raise money for a local charity. The students charged $5.00 for each car they washed. In 3 hours, they washed 12 cars.

At that rate, how many **cars** can be washed in 8 hours?

At that rate, how much **money** could they earn from washing cars for 8 hours?

18. This chart shows amusement parks that offer discounted prices for large groups.

Amusement Park Group Pricing

Park Name	Number of People in Group	Total Cost for Group
Mega Fun Park	15	$150
Super Splash Park	8	$96
Awesome Adventure Park	12	?

The manager of Awesome Adventure Park wants to have the lowest rate per person of all the parks. The rate per person must be more than $7 for the park to make money. Which group rate should the manager use to meet these two requirements?

A. $72

B. $108

C. $120

D. $156

19. Let x represent any number in the set of odd integers greater than 5.

Which inequality is true for all values of x ?

A. $x < 0$

B. $x > 0$

C. $x < 5$

D. $x > 5$

20. Which expression is equivalent to the expression below?

$$g + g + g + g + g + g$$

A. $6 + g$

B. g^6

C. $6g$

D. $\frac{g}{6}$

21. Which two expressions are equivalent for any value of y?

A. $3(3y + 3)$ and $6y + 6$

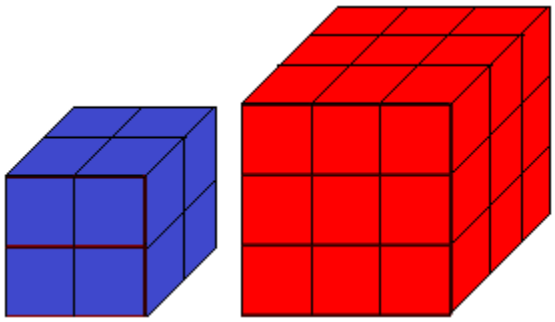
B. $3(3y + 3)$ and $9y + 6$

C. $9(y + 3)$ and $12 + 9y$

D. $9(y + 3)$ and $27 + 9y$

22. Two cubes are placed on a table, one is made up blue cubes and the other is made up red.

Find the correct ratio of the number of blue cubes to red cubes.



A. For every 1 blue cube, there are 2 red cubes.

B. For every 2 blue cube, there are 3 red cubes.

C. For every 4 blue cubes, there are 9 red cubes.

D. For every 8 blue cubes, there are 27 red cubes.

23. What is the value of this expression?

$5[3 \times (9-6)^2] + 4^2$

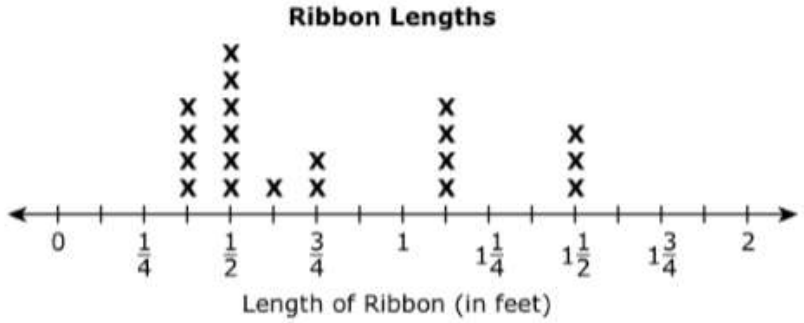
A. 115

B. 151

C. 421

D. 691

24. Sara uses ribbon to make hari bows. The length of each ribbon Sara uses is represented on the line plot shown.



What is the difference, in feet, between one of the pieces of ribbon that has the longest length and one of the pieces of ribbon that has the shortest length?

25. What is the value of $4{,}029 \times 26$?

26. If the 9 were moved two places to the left, which statement describes the relationship between the present value of 9 and the new value of 9?

7,869

A. Thew new value would be 100 times the present value.

B. The new value would be 10 times the present value.

C. The new value would be $\frac{1}{10}$ times the present value.

D. The new value would be $\frac{1}{100}$ times the present value.

27. Which comparison is correct?

A. $\frac{1}{3} \times 45 < 45$

B. $60 < 60 \times \frac{3}{4}$

C. $20 \times \frac{1}{5} > 20$

D. $25 < \frac{2}{3} \times 25$

28. Suzanne wrote the expression shown.

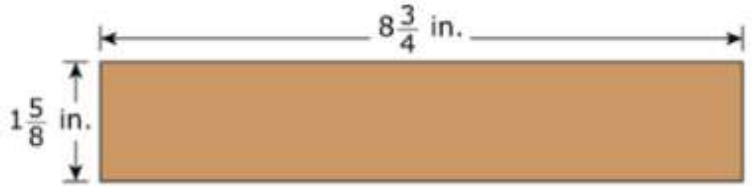
$(5 \times (12 - 6)) \div 2$

What is the value of the expression?

A. 15
B. 27
C. 45
D. 57

29.

A piece of paper is in the shape of a rectangle. The piece of paper is $1\frac{5}{8}$ inches (in.) wide and $8\frac{3}{4}$ in. long.



A student cuts the piece of paper in the following order.

- **The student cuts off $\frac{3}{4}$ inch from the width.**
- **The students cuts off $\frac{3}{4}$ inch from the length.**
- **The student cuts the remaing piece of paper into 12 equally long pieces of paper.**

What is the area of each of the 12 equally long pieces of paper? Explain your answer completely and show all your work. Include in your explanation an equation you can use to find the area of each of the 12 equally long pieces of paper.

Enter your answer, your explanation, your work, and your equation in the space provided.

30.

Select the expression that has a value equivalent to 10^4 .

A. $10+4$

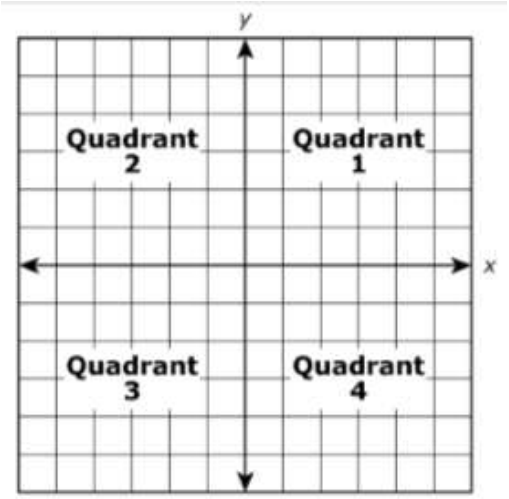
B. 10×4

C. $10\times10\times10\times10$

D. $4\times4\times4\times4\times4\times4\times4\times4\times4\times4$

31.

In which quadrant of the coordinate plane would the point $\left(-10,30\frac{1}{2}\right)$ be located?



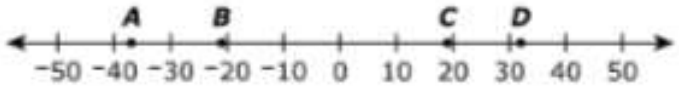
A. Quadrant 1

B. Quadrant 2

C. Quadrant 3

D. Quadrant 4

32. Which point shows the location of the number with the greatest absolute value?



A. point *A*

B. point *B*

C. point *C*

D. point *D*

33. **Annisa wrote an expression that represents "the product of 6.2 and the sum of 3*c* and 8."**

What are the factors of the expression?

Select *each* correct answer.

A. 6.2

B. 3c

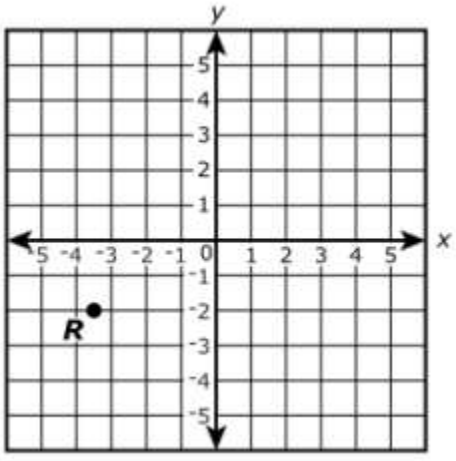
C. 8

D. 6.2 + 3c

E. 3c + 8

F. 6.2 + 8

34. **Point R is graphed on the coordinate grid. What are the coordinates that represent the location of point R?**



35. **The area of Melanie's bedroom floor is 1.5 times the area of her kitchen floor. The area of her kitchen floor is *k*.**

Select each of the following that represent the area of Melanie's bedroom floor.

A. $1.5k$

B. $k+0.5$

C. $k+1.5$

D. $k+0.5k$

E. $k+1.5k$

36. **Which of the given values will make the inequality $n-93>175$ true?**

Select *all* that apply.

A. $n=82$

B. $n=105$

C. $n=268$

D. $n=300$

E. $n=312$

37.

The width of stamp M is $\frac{4}{3}$ inches, and the length is $\frac{7}{5}$ inches. The dimensions of stamp M are $\frac{7}{6}$ times the dimensions of stamp P.

What is the length of stamp P, in inches?

A. $\frac{6}{5}$

B. $\frac{8}{7}$

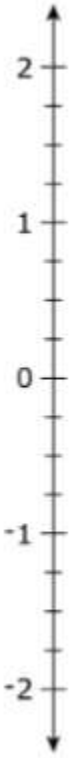
C. $\frac{14}{9}$

D. $\frac{49}{30}$

38.

Plot the point $-1\frac{1}{2}$ on the number line.

Select a place on the number line to plot the point.



39. **Select the *two* values that are about 300 more than 985,382.**

A. 985,082

B. 985,410

C. 985,600

D. 985,680

E. 985,700

F. 988,300

40.

positive	negative	zero

Determine if the following answers would be positive, negative, or zero. Write the WORD in the box

$-5+(-2)$

$-3+3$

$6-7$

$-3+9$

$4+1$

41. Select the ***four*** numbers that have 21 as a mulitple.

A. 1

B. 3

C. 7

D. 14

E. 21

F. 42

42. Which comparisons are correct?

Select the ***three*** correct answers.

A. $3.71 < 3.8$

B. $9.50 > 9.5$

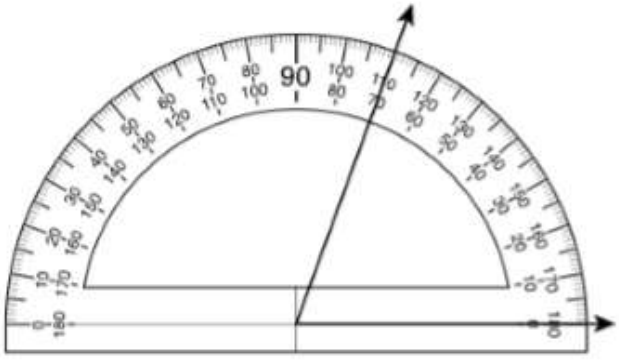
C. $17.01 = 17.1$

D. $20.62 < 20.8$

E. $56.34 > 56.4$

F. $78.4 = 78.40$

43. Kelly drew the angle shown.



Which value is closest to the measurement of Kelly's angle?

A. $40°$

B. $70°$

C. $110°$

D. $180°$

44. There are 12 players on Manny's baseball team. For a snack, each player on the team gets $\frac{3}{4}$ ounce of almonds. How many total ounces of almonds are needed for the team's snack?

45. Which statements represent $4 \times 9 = 36$?

Select the *two* correct statements.

A. 4 more than 9 is 36.

B. 4 times as many as 9 is 36.

C. 4 is 9 times as many as 36.

D. 9 more than 4 is 36.

E. 9 times as many as 4 is 36.

F. 9 is 4 times as many as 36.