Rising Grade 7 Summer Math Packet

The problems in this packet are designed to help you review topics from previous mathematics courses that are essential to your success in grade 6. You are expected to bring this completed packet to class on the first day of school. In addition, this packet will count as part of your first-quarter grade. **Upon returning, you will be ASSESSED on the content of this packet**. All content outlined in the packet is grade 1 material. Neatly SHOW YOUR WORK!

1. The table shows the number of cups of flour, *f*, that a bakery needs for the number of pound cakes that they make, *p*.

Pound Cakes, *p*	3	6	9	14
Cups of Flour, *f*	8.25	16.5	24.75	

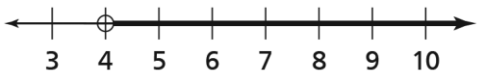
Part A

Write an equation that relates the number of cups of flour to the number of pound cakes that the bakery makes.

Part B

Use the equation to complete the table. Show how you determined the number of cups of flour needed for 14 cakes.

2. Write the inequality that the graph represents.



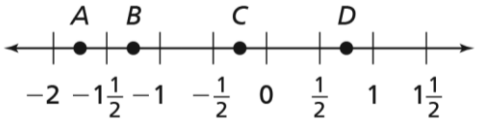
3. For each equation, select the value of the variable that makes the equation true.

	6	15	4.5	8.5
$12.4 - p = 7.9$	❑	❑	❑	❑
$156 \div r = 26$	❑	❑	❑	❑
$8w = 120$	❑	❑	❑	❑
$t + 17.8 = 26.3$	❑	❑	❑	❑
$14 = 63 \div d$	❑	❑	❑	❑

4. Select all the pairs of numbers that are opposites.

- ☐ 6 and −6
- ☐ 8 and $\frac{1}{8}$
- ☐ −(−12) and −12
- ☐ 7 and $-\frac{1}{7}$
- ☐ −0.1 and 10

5. Write the letter of each point on the number line that corresponds to its value. Then explain how you decided which value corresponds to point *B*.



$-\frac{1}{4}$ ☐ $\frac{3}{4}$ ☐ $-1\frac{1}{4}$ ☐ $-\left|-1\frac{3}{4}\right|$ ☐

6. Which expression is **NOT** equivalent to $24 + 6x$?

A. $2(3x + 12)$

B. $28 + 4x - 4 + 2x$

C. $5x + 7 + x + 17$

D. $3(8 + 3x)$

7. To prepare for the winter season, the manager of an outdoor ice skating rink ordered 4,920 pounds of sand to keep the areas around the skating rink from being too slippery. One bag of sand is 40 pounds.

Which equation can be used to find the number of bags of sand, *b*, the manager ordered?

A. $4{,}920 - b = 40$

B. $4{,}920 \div 40 = b$

C. $4{,}920b = 40$

D. $40 + b = 4{,}920$

8. Tamera graphs the following points on a coordinate plane.

P(3, -4) *Q*(-7, 2) *R*(5, 3) *S*(6, -1)

Which statement is correct?

A. A reflection of *P* across the *x*-axis is at (3, 4).

B. A reflection of *Q* across the *y*-axis is at (7, -2).

C. A reflection of *R* across the *x*-axis is at (-5, 3).

D. A reflection of *S* across the *y*-axis is at (6, 1).

9. Use the expression shown below.

$1 \div (4 \times 4 \times 4 \times 4 \times 4)$

Part A

Fill in the blank to write an equivalent expression using an exponent.

$1 \div (4^{\square})$

Part B

What is the value of the expression?

10. Which equation is equivalent to $\frac{3}{5} = 17\frac{2}{5} \div h$?

A. $3 = (87 \div h) - 9$

B. $3 \times 9 = (87 \div h) \div 9$

C. $3 + 9 = (87 \div h) + 9$

D. $3 - 9 = (87 \div h)$

11. What is the value of the expression $3 \times (6 + 1.4) - 4^2$? Describe the steps you followed to find the value.

12. Kyle has picked $5\frac{1}{3}$ bushels of apples. He wants to know how many more bushels, *b*, of apples he needs to pick to have 9 bushels in all.

Part A

Write an equation to describe this situation.

Part B

How many more bushels does Kyle need to pick? Show your work.

13. Use the expression shown below.

$5.2x + 8 + 2.1x - 3$

Part A

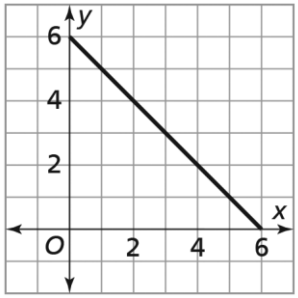
Write an equivalent expression by combining like terms.

Part B

Explain how you used properties of operations in Part A.

14. Rand says the greatest common factor (GCF) of 45 and 75 is 5. Do you agree? Explain.

15. Let y be the number of dollars that Jon has and let x be the number of dollars that Steve has. The graph shows the relationship between how much money they each have, as Jon pays Steve for yard work.



Which equation represents this relationship?

A. $y = 6 + x$

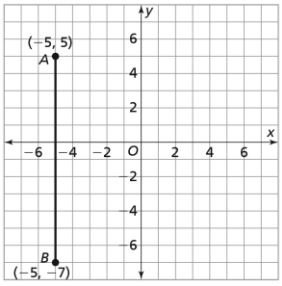
B. $y = 6 - x$

C. $y = x - 6$

D. $y = 6x$

16. The least number of customers in a shop at any time during the day was 15. Fran represented this situation with the inequality $c < 15$, where c is the number of customers in the shop. Is Fran correct? Explain.

17. The points $A(-5, 5)$ and $B(-5, -7)$ are plotted on the coordinate plane.



Part A

Make a rectangle that has points A and B as two of its vertices and has a perimeter of 40 units. Draw and label the two other vertices as points C and D on the coordinate plane. Draw line segments to show the rectangle.

Part B

Explain how you determined the locations of the other two vertices.

18. Which equation is true for $x = 1.8$?

A. $\frac{x}{3} = 0.6$

B. $3x = 7.2$

C. $x + 3.1 = 5.5$

D. $6 = 3.6 + x$

19. Evaluate the expression for each set of values given in the table.

	$a = 4$ $b = 3$	$a = 2$ $b = 21$	$a = 3$ $b = 6$
$\boldsymbol{a^2 + b \div 3}$			

20. Choose numbers from the box to complete each equation. Numbers may be used more than once or not at all.

2	3	4
5	7	9

$\frac{1}{4} \div \frac{5}{8} = \frac{\square}{\square}$ $\frac{1}{3} \div \frac{7}{9} = \frac{\square}{\square}$ $\frac{3}{5} \div \frac{9}{10} = \frac{\square}{\square}$

21. Use the expression shown below.

$(4y + 8) \div 6 - 12$

Complete the table by writing the parts of the expression that correspond to the descriptions.

Description of Part *t*	**Part of Expression**
Variable	
Sum	
Quotient	
Coefficient	

22. Without dividing, write >, <, or = in each circle to make the statements true.

22a. $2\frac{1}{3} \div 2 \bigcirc 2\frac{1}{3}$

22b. $\frac{5}{7} \div \frac{1}{2} \bigcirc 1\frac{3}{7}$

22c. $1\frac{1}{12} \div \frac{4}{5} \bigcirc 1\frac{1}{12}$

22d. $7\frac{1}{9} \div \frac{1}{9} \bigcirc \frac{9}{9}$

23. Find the solution to each equation.

$3k = 48$ $k =$ _____

$7p = 147$ $p =$ _____

$9m = 216$ $m =$ _____

$8c = 184$ $c =$ _____

$4g = 72$ $g =$ _____

24. Find the quotient.

1,107 ÷ 27

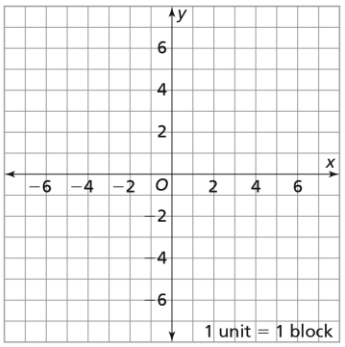
25. Jack writes $-2°C > -5°C$ to compare the temperature on two winter days. Do you agree with his comparison? Explain.

26. Let n be the number of dancing partners at a dance competition. If there are 5 organizers, write an expression that represents the total number of people involved in the competition.

27. Lily used a coordinate plane to graph her path from her house to the library. She started at her house at $A(-6, -3)$, walked to a store at $B(5, -3)$, and then walked to the library at $C(5, 7)$.

Part A

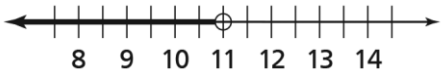
Graph and label the points A, B, and C on the coordinate plane. Then draw line segments to show Lily's path.



Part B

Lily claimed that she walked more than 20 blocks. Do you agree? Justify your answer.

28. Which graph represents the solutions of the inequality $k > 11$?

A. 

B. 

C. 

D. 

29. For each pair of numbers, select the LCM.

	6	12	24	48
8 and 12	❑	❑	❑	❑
2 and 6	❑	❑	❑	❑
3 and 8	❑	❑	❑	❑
6 and 8	❑	❑	❑	❑
3 and 4	❑	❑	❑	❑

30. Richard sells frozen juice cups at a fair for \$1.25 each. The amount of money, *m*, he makes each day and the number of cups, *c*, that he sells are related. Which variable is the independent variable and which is the dependent variable?

Independent	Dependent

31. What is the value of each expression?

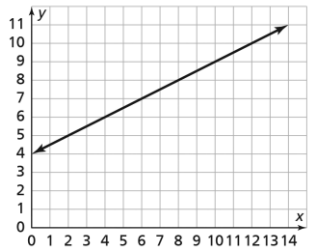
$[3^2 \cdot (2.4 \div 4)] + 1.7 =$ _____

$8.8 + \left(\frac{1}{5} \times 5 + 2.6\right) =$ _____

$(6.7 - 5.6) \cdot 2^3 + 7.5 =$ _____

$(3.3 + 6 \cdot 1.8) + 5^2 =$ _____

32. Let *x* be the amount of hours spent studying and let *y* be the number of points earned on a quiz. The graph of the relationship between *x* and *y* is shown. Which equation represents this relationship?



A. $y = 2x - 2$ **C.** $y = 0.5x + 4$

B. $y = 0.5x - 1$ **D.** $y = x + 4$

33. Select each expression that is equivalent to $\frac{3}{16}$ if $x = \frac{3}{4}$.

- ☐ $2x + \frac{1}{16}$
- ☐ $x^2 - \frac{6}{16}$
- ☐ $\left(\frac{3}{8}\right)^2$, x
- ☐ $x - \frac{1}{4}$
- ☐ $2x - x^2 - \frac{3}{4}$

34. Jacy paid $15.48 to download 12 songs last month. She paid the same amount for each song and also had to spend $5.04 to enroll in the music purchasing program.

Part A

Let *s* represent the amount that Jacy paid for each song she downloaded. Write an equation that you could use to find the value of *s*.

Part B

Explain how you can use inverse relationships to solve this problem.

Part C

How much did Jacy pay to download each song?

35. Last month, Tara worked 16.5 hours the first week, 19 hours the second week, 23 hours the third week, and 15.75 hours the fourth week. She plans to work more hours this month than last month. Write an inequality to represent the number of hours, *h*, Tara plans to work this month.

36. Select all the pairs of numbers that have the same greatest common factor (GCF).

- ☐ 16 and 30
- ☐ 22 and 34
- ☐ 26 and 38
- ☐ 24 and 32
- ☐ 12 and 28

37. Guests arrive in groups of three to a party. 5 people leave the party early. If y is the number of people left at the party, and x is the number of groups that have arrived, then $y = 3x - 5$. Complete the table for the equation $y = 3x - 5$.

x	***y***
2	
	4
	7
5	

38. Which expression is **NOT** equal to 28?

A. 1,288 ÷ 46 **C.** 1,456 ÷ 52

B. 1,820 ÷ 65 **D.** 1,107 ÷ 41

39. Compute the least common multiple (LCM) of each pair of numbers.

2 and 10: _____

3 and 12: _____

8 and 12: _____

4 and 10: _____

8 and 10: _____

40. Select each expression that is equivalent to $18x + 3$.

- ☐ $6\left(3x + \frac{1}{2}\right)$
- ☐ $9\left(2x + \frac{1}{3}\right)$
- ☐ $4(4x + 1) - 1$
- ☐ $2(9x + 5) - 7$
- ☐ $3(6x + 2) + 3$

41. Ethan's dad is five years younger than four times Ethan's age, *a*. Write an algebraic expression that represents the age of Ethan's dad.

42. Solve the equation.

$$3\frac{2}{3}x = 2\frac{2}{5}$$

A. $x = 1\frac{19}{36}$

B. $x = 8\frac{4}{5}$

C. $x = \frac{5}{44}$

D. $x = \frac{36}{55}$

43. Which equation has $x = 17$ as the solution?

A. $73 + x = 80$

B. $11 = x - 6$

C. $4x = 72$

D. $48 + x = 64$

44. Which table represents the ratio 3 rotten apples for each 15 fresh apples?

A.

Rotten Apples	15	25	35
Fresh Apples	3	5	7

B.

Rotten Apples	15	25	35
Fresh Apples	3	6	9

C.

Rotten Apples	3	6	9
Fresh Apples	15	25	35

D.

Rotten Apples	3	5	7
Fresh Apples	15	25	35

45. The bar diagram below represents the ratio of points scored by the home team and the visiting team in a basketball game.

Part A: How many points did the visiting team score if the home team scored 84 points?

Part B: Explain how you used the bar diagram to solve Part A.

46. Steve sold 252 fruit baskets for a school fundraiser. Evie sold 25 fruit baskets for each 100 of the number of baskets that Steve sold. How many fruit baskets did Evie sell?

47. Peter wants to buy a coat that costs $87 at full price. The coat is now on sale for 40% off.

Part A

Explain how Peter can use the fact that 10% of $87 is $8.70 to find the amount he will save on the coat.

Part B

Use the same method to find the amount Peter would save on a $64 coat that is on sale for 30% off.

48. Write one of the given measurements to match a measurement on the left with an equivalent measurement on the right.

12 tbsp	16 qt
8 tbsp	24 fl oz
16 c	

24 tsp _____

6 fl oz _____

8 pt _____

4 gal _____

3 c _____

49. Dan read 104 pages of his book. He has 68% of his book left to read. How many pages are in his book? Explain.

50. Kevin correctly answered 75% of 32 test questions.

Part A

How many questions did Kevin answer correctly?

Part B

How many more questions would Kevin have had to answer correctly to get more than 80% correct? Explain.

51. Select all of the measurements that are equivalent to 528 meters.

- ☐ 52,800 cm
- ☐ 528,000 km
- ☐ 5,280 cm
- ☐ 528,000 mm
- ☐ 0.528 km

52. Sheila is biking at a constant speed. She travels 54 meters in 9 seconds. How long would it take Sheila to travel 90 meters at this speed?

Pat	
Sales	**Customers**
2	3
4	
6	
8	

Rick	
Sales	**Customers**
3	4
6	
9	
12	

53. Pat and Rick are sales associates at a store. Pat makes 2 sales for every 3 customers that he helps. Rick makes 3 sales for every 4 customers that he helps.

Part A

Complete the ratio tables.

Part B

Does Pat or Rick have a better ratio of sales to customers? Explain.

54. Choose a number from the box to complete each conversion.

7.6	9.3	11.8
12.7	16.4	17.6

5 in. = ☐ cm

8 kg. » ☐ 1b

8 qt. » ☐ L

55. Susan can buy 6 flower seed packets for $2. If all the seed packets cost the same amount of money, how many packets can Susan buy for $10?

A. 12 packets
B. 20 packets
C. 24 packets
D. 30 packets

56. A department store has 950 customers one day, and 82% of customers made a purchase. Of the customers who made a purchase, 528 bought just one item, 186 bought two items, and the remainder bought three or more items. How many customers bought three or more items? Explain.

57. Cary earned $56 for 7 hours of babysitting. How much would Cary earn for 55 hours of babysitting?

58. At Brown Elementary School, 80% of all fifth graders ride the bus to school. If 124 fifth graders ride the bus to school, how many fifth graders are there at the school?

59. Mrs. Allan's car uses 8 gallons of gas for a 224-mile trip. Mrs. Owen's car uses 6 gallons of gas for a 210-mile trip. How many gallons of gas would each car use if both cars traveled 560 miles? Explain.

60. A store sells packs of 3 mini-pizzas for $5.

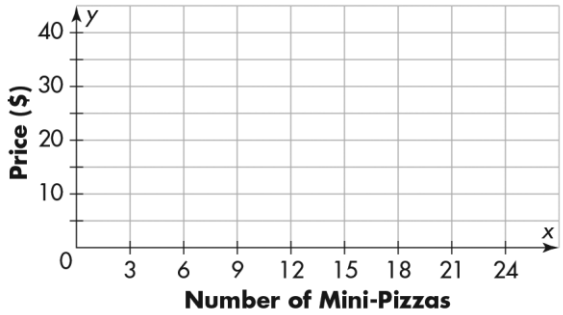
Part A

Complete the ratio table to show the price for up to 15 mini-pizzas.

Mini-Pizzas		6		12	15
Price ($)	5		15		

Part B

Plot the data from the table on the coordinate plane. Then draw a line to show the cost of more mini-pizzas.



Part C

How much would 24 mini-pizzas cost?

61. Which list of numbers is ordered from greatest to least?

A. $-2\frac{1}{5}, |2\frac{1}{4}|, 2.23, -2$

B. $|2\frac{1}{4}|, 2.23, -2, -2\frac{1}{5}$

C. $-2, -2\frac{1}{5}, |2\frac{1}{4}|, 2.23$

D. $-2\frac{1}{5}, -2, 2.23, |2\frac{1}{4}|$

62. Henry is buying orange juice to make punch for a party. He can buy the juice in 32-oz cartons for $2.56 each or 48-oz cartons for $3.36 each. Which is the better value? Explain.

63. Find the following measures of the data set shown in the box plot below.

minimum: ☐

maximum: ☐

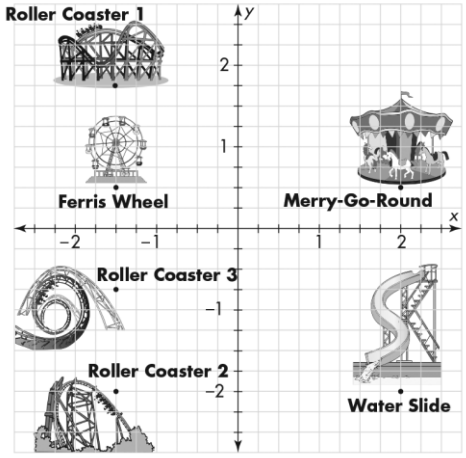
median: ☐

first quartile: ☐

third quartile: ☐

interquartile range: ☐

64. Use the map of the amusement park.



Part A

What are the coordinates of the ride located 1.25 units away from Roller Coaster 1, and 3.5 units away from the Merry-Go-Round?

Part B

What is located at $(-1.5, -2)$?

65. Select all the pairs of expressions that are equivalent.

- ☐ $14d + 21$ and $7(2d + 3)$
- ☐ $9(5r - 2)$ and $14r - 7$
- ☐ $8(6q - 9)$ and $48q - 72$
- ☐ $16 + 4w$ and $2(2w + 8)$
- ☐ $32t + 16$ and $16(2 - t)$

66. A gym charges membership dues of $25 per month.

Part A

Complete the table to show how the total cost in dollars, C, and the number of months, m, of gym membership are related.

m	3	8	14
C			

Part B

Write an equation to represent the total cost based on the number of months of gym membership.

67. Which of the following is a statistical question?

A. How tall is Mr. Leung?
B. What are the ages of all your cousins?
C. What is the formula for the volume of a cube?
D. What is the school's address?

68. Kristy had a piece of fabric that she cut into 8 equal squares. Each square has area 0.625 ft^2. What is the area of Kristy's original piece of fabric?

69. Rachel is making nachos for a party. The recipe calls for $\frac{2}{3}$ cup of cheese for each plate of nachos.

Part A

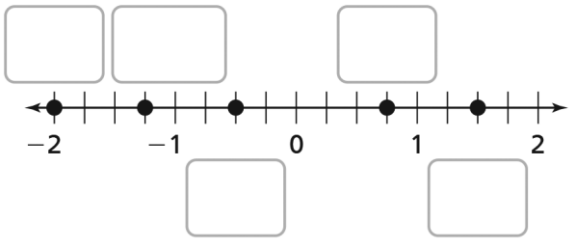
How many full plates of nachos can Rachel make with 5 cups of cheese? Explain.

Part B

How many more cups of cheese would Rachel need to make 9 plates of nachos? Explain.

70. Fill in the boxes to plot the five rational numbers below on the number line.

$$-0.5, \frac{3}{2}, 0.75, \frac{10}{5}, -1.25$$



71. The boiling point of water is 212°F. In degrees Celsius, how much heat do I have to add to boil water that is already 185°F? Use the formula

$C = \frac{5}{9}(F - 32)$, where C represents the temperature in degrees Celsius and F represents the temperature in degrees Fahrenheit.

A. 100°C

B. 15°C

C. 32°C

D. 185°C

72. A small theater sold 72 tickets for a play. The ratio of adult tickets to child tickets was 4 : 1. The ratio of adult tickets to senior tickets was 4 : 3.

Part A

Draw a diagram or make a table to represent the types of tickets sold.

Part B

How many of each type of ticket were sold?

73. Use the given set of coordinates to write the reflection across the *x*-axis of each point on the left.

$(7, -2)$ $(-3, 9)$ $(3, -9)$ $(-2, -7)$

(−2, 7) _____

(3, 9) _____

(7, 2) _____

(−3, −9) _____

74. The drama club spent $608 on food for a party for its 38 members. The hall they rented costs $40 per hour. The door prize was worth $200. Let a be the amount spent on food per person and b be the number of hours they rented the hall.

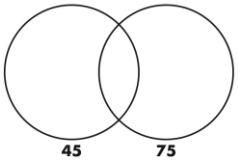
Part A

Write an equation to represent how much was spent on this event. Let *S* be the total amount spent.

Part B

Find how much the club spent on food per person.

75. Complete the Venn diagram to show the common factors of 45 and 75. Then circle the greatest common factor.



76. Select all the expressions that have a value of $2^2 - 3^3 + 29$.

- ☐ $(7^8 , 3) – 2^4$
- ☐ $8^3 − 14 × 6^2 − 2$
- ☐ $−|−6|$
- ☐ $|−6|$
- ☐ $7^2 − 3.1 − 19 × 2.1$

77. Use the expression shown below.

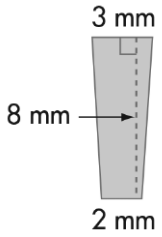
494 ÷ 95 = _____

136.8 ÷ 24 = _____

96.9 ÷ 19 = _____

43.2 ÷ 8 = _____

78. What is the area of this trapezoid?



A. 100°*C*

B. 15°*C*

C. 32°*C*

D. 185°*C*

79. Caroline weighs 41,390,000 milligrams and her baby sister weighs 3,415 grams. What is their total weight in kilograms?

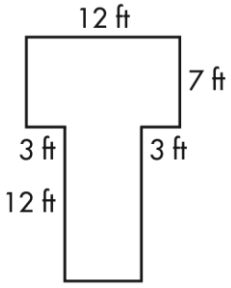
A. 4.4805 kg

B. 448.05 kg

C. 44.805 kg

D. 4480.5 kg

80. Meredith drew the shape shown below.



Find the area of the shape. Explain.

81. Chang used a coordinate plane to show where his posters are displayed on his bedroom wall. Three posters are located at $E(5, 3)$, $F(-4, 3)$, and $G(-4, 5)$.

Use absolute values of coordinates to find the distances between points E and F, and between points G and F. Show your work.

82. Let x be the number of hours that Chaya studies for a test and let y be the number of points she receives on the test. For one test, Chaya studied for 5 hours and received 14 points. Select all the equations that could describe Chaya's grades and her study time.

- ☐ $y = 2.8x$
- ☐ $y = 5x$
- ☐ $y = x - 9$
- ☐ $y = \frac{1}{2}x$
- ☐ $y = x + 9$

83. The table shows the relationship the choir director tries to maintain between the number of sopranos and the number of altos in the chorus. Complete the table using the ratio given.

Chorus Members

Sopranos	Altos
7	5
14	
21	
	20

84. What is the volume of a rectangular prism with $l = 4\frac{1}{2}$ cm, $w = 3\frac{1}{2}$ cm, and $h = 6$ cm, in cubic cm?

A. $90\frac{1}{2}$ **B.** $94\frac{1}{2}$ **C.** 95 **D.** $95\frac{1}{2}$

85. Larry is a locavore, which means he tries to only eat food produced within 200 miles of his home. Which inequality represents the distance, d, from Larry's home of food that he does not eat?

A. $d > 100$ **C.** $d < 200$

B. $d > 100$ **D.** $d < 200$

86. The number of students in each of the classes that Julia is taking and each of the classes that Mason is taking are shown below.

Julia's classes: 25, 23, 28, 32, 27

Mason's classes: 20, 26, 24, 31, 29

Select all the statements that are true.

- ☐ The mean is greater for Mason's classes than for Julia's classes.
- ☐ For both sets of data, the median is equal to the mean.
- ☐ The mean absolute deviation (MAD) is greater for Julia's classes than for Mason's classes.
- ☐ The interquartile range (IQR) is greater for Mason's classes than for Julia's classes.
- ☐ The numbers of students in Julia's classes are less spread out than those in Mason's classes.

87. Ms. Wertz graded 20% of the tests for her class in 16 minutes.

Part A

Which equation can be used to find how many minutes it will take to grade all of the tests?

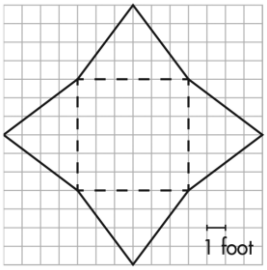
A. $0.2m = 16$ **C.** $16m = 20$

B. $\frac{m}{20} = 16$ **D.** $\frac{20}{m} = 16$

Part B

How many minutes will it take to grade all of the tests?

88. Logan used the net below to design a nylon tent.



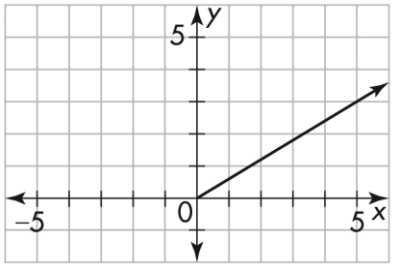
Part A

What shape will the tent have?

Part B

How much nylon will Logan need to make the tent? Explain.

89. Let x be the profit of a company and let y be the amount the company owner makes, both in thousands of dollars. The graph shows the relationship between x and y. Which equation describes this relationship?



A. $y = x - 3$ **C.** $y = 0.6x$

B. $y = 5x$ **D.** $y = x + 5$

90. The area of the rectangular floor in Tamara's room is $95\frac{5}{6}$ square feet. The width of the room is $8\frac{1}{3}$ feet.

Part A

Estimate the length of Tamara's room. Explain.

Part B

Find the exact length of Tamara's room. Was your estimate an overestimate or an underestimate?

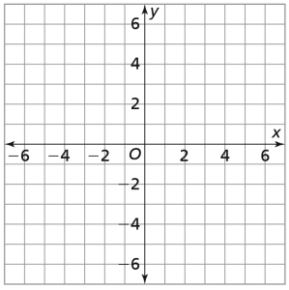
Part C

Suppose the ceiling is 12 feet high. If Tamara orders 480 square feet of wallpaper, will she have enough to cover all four walls? Explain.

91. Find the quotient.

$$\frac{7}{8} \div 2\frac{1}{4} =$$

92. Graph and label the points $A\left(-2\frac{1}{2}, 0.5\right)$ $B\left(2, 5\frac{1}{2}\right)$, and $C\left(3.5, -4\frac{1}{2}\right)$ on the coordinate plane below.

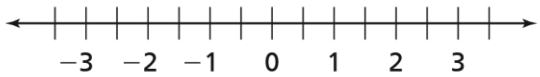


93. Colleen has a bank account balance of $16.43. Toby has a bank account balance of -$10.21. Yosef has a bank account balance of $8.98. Select all the statements that are true.

- ☐ Colleen has the most money in her bank account.
- ☐ Toby has more money than Colleen.
- ☐ Yosef has less money than Toby.
- ☐ Toby's balance is further from $0 than Yosef's balance.
- ☐ Colleen's balance is further from $0 than Toby's balance.

94. A baker has $1\frac{3}{4}$ cups of sprinkles to spread on cupcakes. Each cupcake needs $\frac{1}{8}$ cup of sprinkles. How many cupcakes can the baker sprinkle?

95. Graph and label point *A* at $2\frac{1}{2}$, point *B* at -2.75, and point *C* at -0.25 on the number line below.



96. The table shows the low temperatures in four cities on Saturday.

City	Temperature (°C)
Alford	-2.5
Gainesville	-0.4
Follett	-6.1
Fowlerton	3.4

Part A

Write each temperature in a box below to show the order from coldest to warmest.

☐ < ☐ < ☐ < ☐

Part B

Explain how you could use a number line to order the temperatures.

97. Luke hiked $6\frac{1}{4}$ miles. Joana hiked $2\frac{1}{5}$ times as far. How far did Joana hike?

98. Which expression is **NOT** equal to 28?

A. 1,288 ÷ 46

B. 1,820 ÷ 65

C. 1,456 ÷ 52

D. 1,107 ÷ 41

99. Select all the inequalities that are true.

☐ $1\frac{3}{5}, \frac{1}{3} > 1\frac{3}{5}$

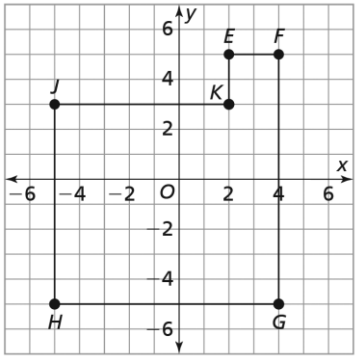
☐ $1\frac{2}{3} \times 1\frac{3}{5} > 1\frac{3}{5}$

☐ $\frac{3}{4}, 1\frac{3}{5} < 1\frac{3}{5}$

☐ $1\frac{3}{5}, 1\frac{1}{4} < 1\frac{3}{5}$

☐ $1\frac{3}{5}, \frac{3}{2} < 1\frac{3}{5}$

100. What is the perimeter, in units, of polygon *EFGHJK*? Show your work.



101. Which expression has a quotient of 61?

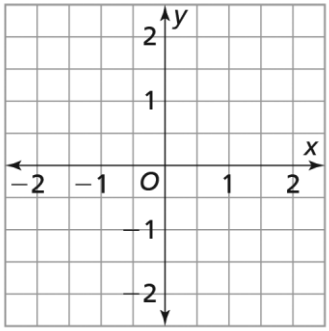
A. 2,914 ÷ 47

B. 4,650 ÷ 75

C. 3,276 ÷ 52

D. 5,063 ÷ 83

102. Clara drew a map of her school on a coordinate plane. The computer lab is at $J\left(2, 1\frac{1}{2}\right)$, the band room is at $K\left(-1\frac{3}{4}, -2\right)$, and her math class is at $L\left(1\frac{3}{4}, -1\frac{1}{2}\right)$. Graph and label each point on the coordinate plane.



103. Paul makes $11.75 an hour at his job. This week, he worked 20 hours. How much did he make this week?

A. $220.00

B. $225.00

C. $235.00

D. $240.00

104. What number is $\frac{1}{10}$ the value of 237?

105. The table shows the temperatures in different cities around the world.

City	Temperature (°C)
Danville	-22
Somerville	-6
Ulsan	15
Keflavik	-13
Smithfield	18

Part A

Order the temperatures from coldest to warmest.

Part B

Order the absolute values of the temperatures from least to greatest.

106. Which expression is equivalent to 735 ÷ 100?

A. 7.35 ÷ 1,000

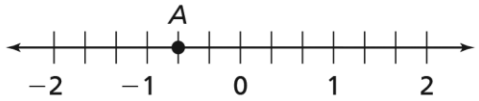
B. 735 ÷ 0.01

C. 735 ÷ 0.001

D. 73.5 ÷ 100

107. Jason is 4.52 feet tall. His sister is 0.75 times his height. How tall is his sister? Show your work.

108. Which rational number corresponds to point *A* on the number line?



A. $-\frac{1}{3}$

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

C. $-1\frac{1}{3}$

D. $-1\frac{2}{3}$

109. Point *E* is located at (-5, 2). Point *M* is the reflection of point *E* across the *y*-axis. What is the distance between *E* and *M*? In what quadrant is point *M*?

110. The table shows masses of different types of nuts that Nathan buys. He plans to mix the nuts and then separate them into bags. Each bag will have 1.2 kg of nuts in it. He wants to know how many bags of mixed nuts he can fill.

Type of Nut	Mass (kg)
Almonds	3.64
Cashews	2.79
Peanuts	3.44
Pine Nuts	2.73

Part A

Explain the steps you need to take to solve this problem.

Part B

How many bags of mixed nuts will Nathan fill? How can you tell the last bag will be only partially filled?

