



DISTANCE LEARNING PACKET

6TH GRADE

MATH

DAY 6

1. What integer represents 10 degrees below zero?

What integer represents 10 degrees above zero?

2. Choose which expressions are represented by +5 and which are represented by -5.

- ___ a gain of 5 yards ___ 5 degrees above zero ___ diving 5 feet under water
 ___ a loss of 5 pounds driving 5 miles ___ flying 5 feet in the air

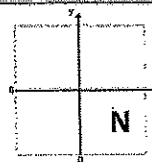
3. A pipe is located 45 feet below sea level. What integer represents the location of the pipe? -45

4. Which integer makes the following sentence true? $-10 < ? < -1$

- A. -16 B. -22 C. -8 D. 9

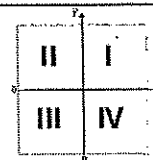
5. Which of the following coordinates might be the location of Point N?

- A. (4,4) B. (-4,4) C. (-4,-4) D. (4,-4)



6. In which QUADRANT are each of the following points located?

- (2,2) in Q___ (-2, -2) in Q___ (-2, 2) in Q___ (2,-2) in Q___

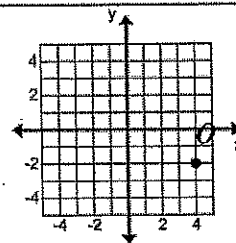


7. Which integer makes the sentence true? $-10 < ? < 9$

- A. 10 B. 7 C. -11 D. -17

8. Put the decimals in order from least to greatest: 1.5, -1.5, 4.3, -4.5, 2.0, -2.0, 2.5, -2.5, 0.5, -0.5, 0

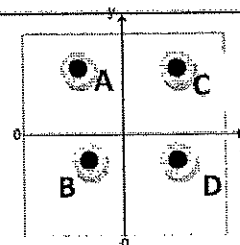
9. What are the coordinates of point Q after it is reflected over the y-axis?



10. What is the absolute value of 34?

11. If both coordinates of a point on the coordinate plane are negative, which of the points could it be?

If both coordinates of a point on the coordinate plane are positive, which of the points could it be?



12. True or False?

- Negative numbers are located to the right of 0 on a number line.
- Negative numbers are located to the left of 0 on a number line.
- The absolute value of a negative number is negative.
- The absolute value of a negative number is positive.
- Negative numbers are greater than positive numbers.
- Negative numbers are less than positive numbers.
- A negative number is less than its opposite.

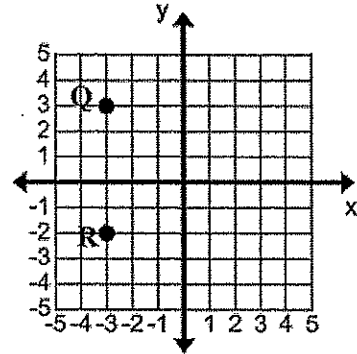
13. What number is the opposite of 56?

14. In the graph, how far is it from Point Q to Point R?

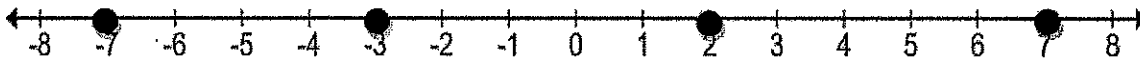
15. Draw 2 more points on the graph to make a square with Q and R.

16. What is the perimeter of your new square?

17. What is the area of the square?

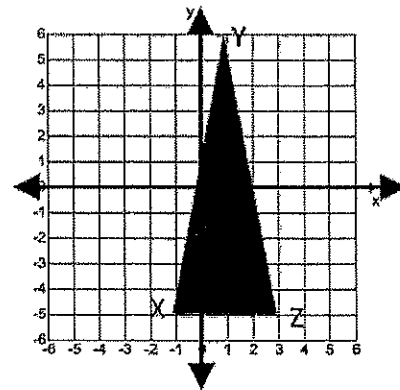


18. Baby Bo is growing fast. He gained 7 pounds. Which point on the number line below represents his gain?



19. What are the coordinates of Point Y?

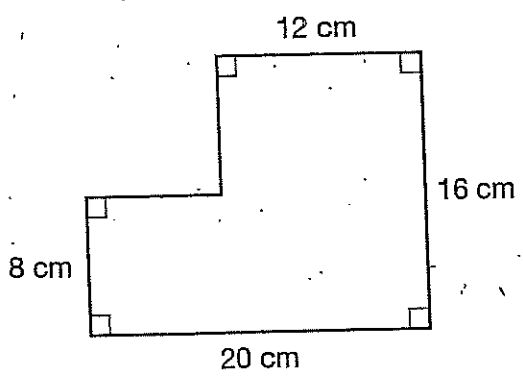
20. Find the distance between Point X and Point Z.



Areas of Composite Polygons

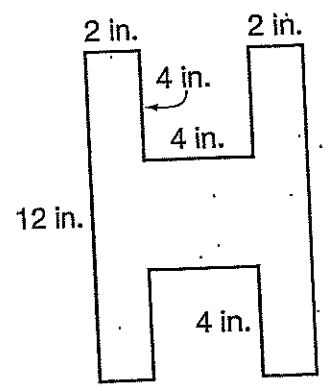
DAY 7

1. What is the area of this figure?



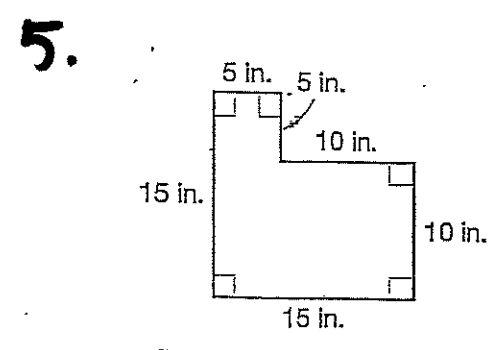
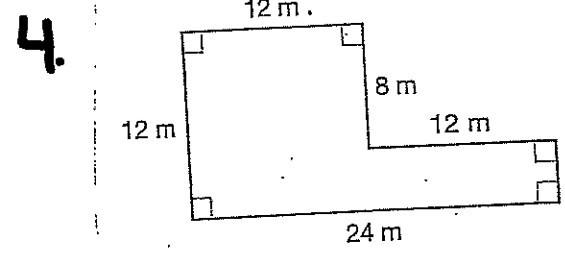
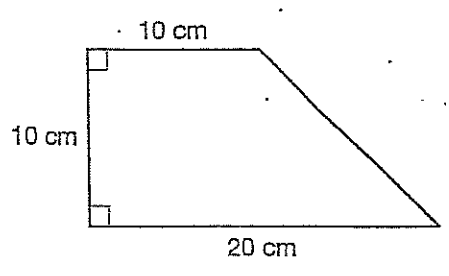
- A. 192 cm^2
- B. 256 cm^2
- C. 312 cm^2
- D. 320 cm^2

2. What is the area of this figure?



- A. 48 in.^2
- B. 56 in.^2
- C. 64 in.^2
- D. 96 in.^2

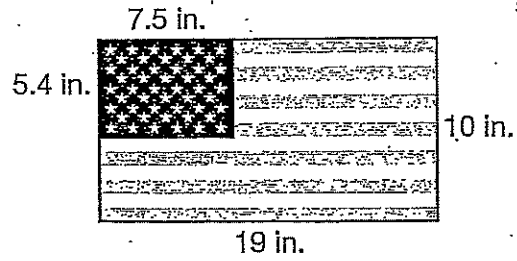
3. Find the area of each polygon.



6.

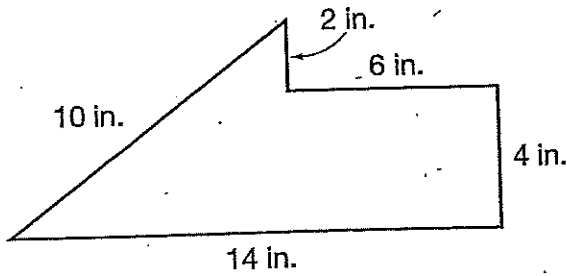
The dimensions of an American flag are shown at the right.

What is the area of the striped part of the American flag?



7.

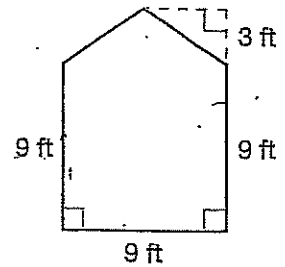
What is the area of this figure?



- A. 140 in.^2
- B. 84 in.^2
- C. 72 in.^2
- D. 48 in.^2

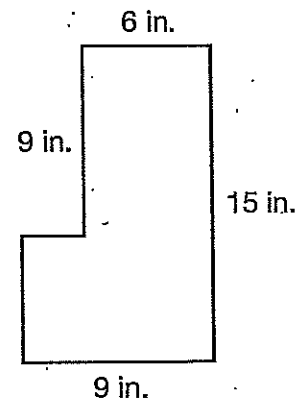
What is the area of this figure?

9.



10.

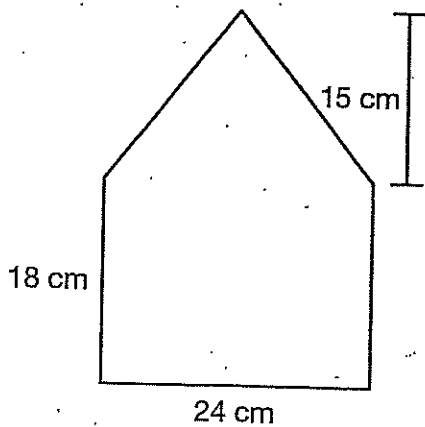
What is the area of this figure?



- A. 108 in.^2
- B. 117 in.^2
- C. 126 in.^2
- D. 135 in.^2

8.

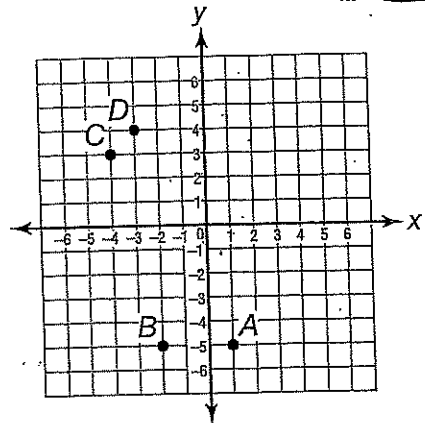
What is the area of the pentagon?



Use the coordinate plane for questions 1-3.

DAY 8

EXAM UNITS 1-4



- 1. Which point is located at $(-2, -5)$?
A. point A
B. point B
C. point C
D. point D

- 2. Which point is located at $(-4, 3)$?
A. point A
B. point B
C. point C
D. point D

- 3. Which point is located in quadrant IV?
A. point A
B. point B
C. point C
D. point D

- 4. Mr. Joyner paid \$16.45 for 3.5 pounds of potato salad. How much did he pay for each pound of potato salad he bought?
A. \$1.80
B. \$4.70
C. \$5.48
D. \$12.95

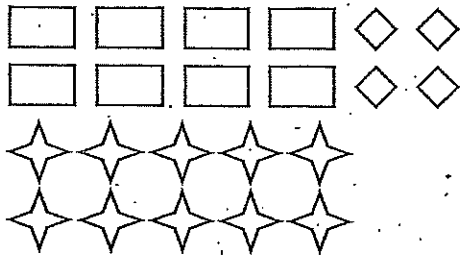
- 5. What is the value of c in the following equation?
$$29 + c = 62$$

A. 33
B. 43
C. 81
D. 91

- 6. What is the GCF of 24 and 36?
A. 12
B. 9
C. 6
D. 3

- 7. What is the reciprocal of $4\frac{5}{8}$?
A. $\frac{8}{45}$
B. $\frac{8}{37}$
C. $\frac{8}{5}$
D. $3\frac{7}{8}$

- 8. Michael will be running a 15-mile road race this weekend. How many feet will he run?
A. 26,400 feet
B. 26,700 feet
C. 78,900 feet
D. 79,200 feet



9. In simplest form, what is the ratio of rectangles to stars?

- A. 1:2
- B. 4:5
- C. 2:1
- D. 5:2

10. Which value of x will make these ratios equivalent?

$$\frac{25}{30} = \frac{5}{x}$$

- A. 20
- B. 10
- C. 6
- D. 5

11. A recipe for 4 loaves of bread uses 3 tablespoons of honey. How much honey is needed for 24 loaves of bread?

- A. 6 teaspoons
- B. 8 teaspoons
- C. 12 teaspoons
- D. 18 teaspoons

12. What is the LCM of 6 and 10?

- A. 12
- B. 20
- C. 30
- D. 60

13. Dean's car weighs $1\frac{1}{4}$ tons. How many pounds does his car weigh?

- A. 2,000 lb
- B. 2,125 lb
- C. 2,375 lb
- D. 2,500 lb

14. A bottle of water has a capacity of 750 milliliters. Which is an equivalent measure in liters?

- A. 7,500 L
- B. 75 L
- C. 7.5 L
- D. 0.75 L

15. What is the value of j in the following equation?

$$j - 87 = 165$$

- A. 78
- B. 88
- C. 242
- D. 252

16. What is the value of n in the following equation?

$$22n = 418$$

- A. 12
- B. 14
- C. 19
- D. 24

17. What is the value of k in the following equation?

$$\frac{1}{5}k = 5$$

- A. 0
- B. 1
- C. 10
- D. 25

18. 24 is 16% of what number?

- A. 0.384
- B. 15
- C. 38.4
- D. 150

DAY 8

19. What is the value of the expression below when $a = 2$ and $b = 4$?

$$3a + b$$

- A. 9
- B. 10
- C. 18
- D. 24

22. What is the value of the expression below when $a = 4$?

$$6a + 7$$

- A. 31
- B. 41
- C. 53
- D. 71

20. Miley drove 288 miles in $4\frac{1}{2}$ hours. What was Miley's average speed in miles per hour?

- A. 58 miles per hour
- B. 52 miles per hour
- C. 64 miles per hour
- D. 66 miles per hour

23. What is the value of the expression below when $x = 6$ and $y = 2$?

$$xy - y^3$$

- A. 4
- B. 15
- C. 54
- D. 1,000

21. There are 25 students performing in the holiday concert. Of the students, 11 are boys. What percent of the students are boys?

- A. 44%
- B. 48%
- C. 52%
- D. 56%

24. Which expression represents "the product of a number g and 8"?

- A. $g + 8$
- B. $g - 8$
- C. $8g$
- D. $8 \div g$

25. Which expression is equivalent to $9(4 + r)$?

- A. $36r$
- B. $36 + r$
- C. $13r$
- D. $36 + 9r$

28. Which expression is equivalent to $b + b + b + b$?

- A. $4b$
- B. $b + 4$
- C. b^4
- D. $b \div 4$

26.

What is the product of $\frac{2}{5} \times \frac{3}{8}$?

- A. $\frac{3}{20}$
- B. $\frac{3}{10}$
- C. $\frac{5}{13}$
- D. $1\frac{1}{15}$

29. Which expression is equivalent to $9c + 12d + 2c$?

- A. $18c^2 + 12d$
- B. $11c + 12d$
- C. $11c^2 + 12d$
- D. $23cd$

27. Which step should be taken to isolate the variable in the following equation?

$$7d = 49$$

- A. Add 7 to both sides of the equation.
- B. Subtract 7 from both sides of the equation.
- C. Multiply both sides of the equation by 7.
- D. Divide both sides of the equation by 7.

30. Which expression is equivalent to $7(3 + g)$?

- A. $21 + g$
- B. $10g$
- C. $21 + 7g$
- D. $21g$

BONUS !!

The Shakespeare festival produced by a local theater company was attended by 14,350 people, of whom 28% were high school students. How many high school students attended the Shakespeare festival?

STUDY GUIDE for 6th Grade Math Unit 1

DAY 9

1. What is the Greatest Common Factor (GCF) of 12 and 42 ? CC.6.NS.4

2. What is the Least Common Multiple(LCM) of 5 and 20? CC.6.NS.4

3. Compute: $\frac{1}{2} \div \frac{3}{5} =$ CC.6.NS.1

4. Compute: $1,476 \div 18 =$ CC.6.NS.2

5. Refer to the October calendar to the right. Jay's trash is picked up on days that are multiples of 5 and the paper is delivered on days that are multiples of three. How many dates in October is the trash picked up on the same day the paper is delivered? CC.6.NS.4

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

6. A floor is 14.7 feet by 13 feet. What is the area of the room?
(hint: Area = length x width) CC.6.NS.3

7. There are 1,775 pennies in Jay's jar. If 25 pennies are needed to fill a bag, how many whole bags can Jay fill? CC.6.NS.2

8. The spaceship travels around the sun at a speed of 12.6 miles per second. How far will it travel in 45 seconds? CC.6.NS.3

Use the chart to the right to answer questions 9 and 10.

9. What was the difference between John and Bob in the chart? CC.6.NS.3

10. How much time did it take Ally, Jeff & Kate all together? CC.6.NS.3

Racer	Time
Ally	53.96
Bob	54.15
Jeff	54.3
John	54.33
Kate	54.41

11. The height of dachshunds is usually $\frac{1}{3}$ their length. If Mollie is 20 inches long, how tall is she? CC.5.NF.6

12. For which number will a list of its factors include 7?
 A. 24 B. 26 C. 28 D. 30 CC.6.NS.4

13. There are 14.25 carpet tiles lined up on the floor and each one is 2.5 feet long. How long is the line of carpet tiles? CC.6.NS.3

14. You are taking a bus trip from LaGrange to New Orleans. You will have to drive 491.2 miles. CC.6.NS.3
The bus gets 8 miles per gallon. How many gallons of gas will the bus use driving from LaGrange to New Orleans?
-

15. Is $2(9 + 12) = 42$? Why or why not? CC.6.NS.4

- A. Yes, because $2 \cdot 9 = 18$; and $18 + 18 = 42$
B. Yes, because $2 \cdot 9 = 18$; and $2 \cdot 12 = 24$; and $18 + 24 = 42$
C. No, because $2 \cdot 9 = 18$; and $18 + 12 = 30$
D. No, because $2 \cdot 9 = 18$; and $9 \cdot 12 = 108$; and $18 + 108 = 126$
-

16. Which number is both a multiple of 6 and a factor of 60? CC.6.NS.4
A. 10 B. 12 C. 15 D. 20
-

17. Which number sentence is represents what is in the model?



- A. $12 \div 2 = 6$ B. $10 \div 1 = 10$ C. $2\frac{1}{2} \div \frac{1}{2} = 5$ D. $\frac{12}{4} \div \frac{2}{4} = 6$
-

18. What is the LCM of 6 and 8? CC.6.NS.4
-

19. Which of the following choices is equal to $22 + 36$? CC.6.NS.4
A. $2(11 + 16)$ B. $2(11 + 18)$ C. $3(7 + 12)$ D. $3(22 + 12)$

Lin

Practice

DAY 10

REVIEW

1. 260 is 80% of what number?
2. Alice bought 24 feet of yarn. How many yards of yarn did she purchase?
3. 48, 60, 56, 46, 55 mean _____ IQR _____

Compare. Write $>$ or $<$.

4. $-3\frac{1}{8} \bigcirc -6$

5. $-1 \bigcirc -0.5$

6. $0.29 \bigcirc 0.9$

7. $6\frac{3}{4} \bigcirc -10$

8. $-1.35 \bigcirc -\frac{1}{3}$

9. $7.3 \bigcirc 7\frac{2}{3}$

10. $-6\frac{2}{5} \bigcirc -5.9$

11. $-2.8 \bigcirc -2$

12. $5\frac{4}{5} \bigcirc 5.4$

Order from least to greatest.

13. 1.75, 0, -4

14. $-3\frac{1}{2}$, -1.5, -3

REMEMBER You can use a number line to help order rational numbers.

15. $2\frac{5}{8}$, -0.58, -2

16. -10.1, -1.1, -11

Order from greatest to least.

17. $-4\frac{1}{6}$, 6.4, -0.64

18. 5.2, $5\frac{2}{3}$, -3

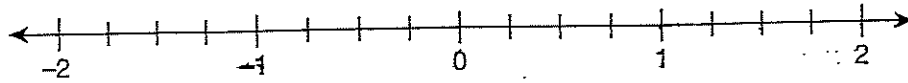
19. $1\frac{2}{5}$, -0.2, 2.15

20. -6, $-\frac{1}{2}$, $-\frac{1}{6}$

21.

Use the number line to order each set of numbers.

List 0 , $\frac{1}{4}$, -0.75 , $1\frac{3}{4}$, and -1.5 from least to greatest.



Evaluate the absolute value of each integer.

22. $|7|$

23. $|-4|$

24. $|21|$

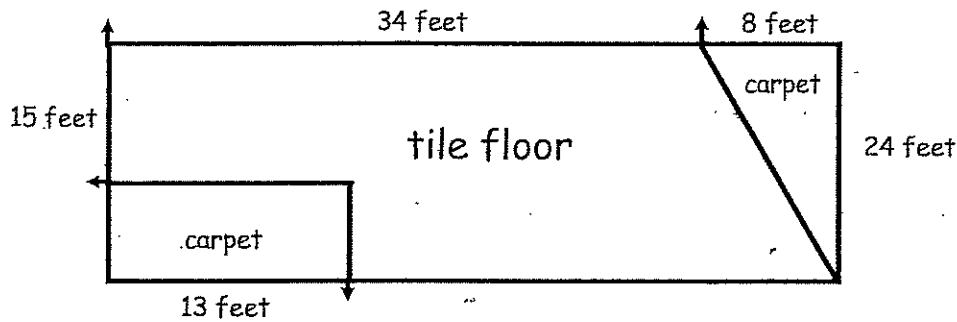
25. $|-10|$

26.

At opening bell, Stocks A, B, and C had the same value. By the closing bell, Stock A's value was -2.4 , Stock B's value was 0.9 , and Stock C's value was -3 . Which stock gained the most? Which stock lost the most?

27.

Hannah ran her first lap around the track in 50.5 seconds. She ran her second lap in 51.2 seconds. She ran her third lap in 49 seconds. Which lap was Hannah's slowest lap? Which lap was Hannah's fastest lap?



Your job is to wax the tile floor and vacuum the carpet at this office complex.

28. How many square feet of tile do you have to wax?

29. If you get paid \$15 for every 75 square feet you wax, how much will you earn when you wax the floor?

30. If you get paid \$5 for every 50 square feet of carpet you vacuum, how much will you earn if you vacuum the carpet?

31. If you did this job four times in one month, how much will you earn in one month?