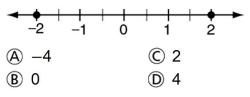
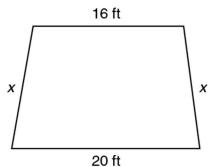


1 What is the sum of the points plotted on the number line below?



- 2 The distance between two cities on a map measures 3.75 inches. The scale on the map shows that 2 inches is equal to 50 miles. How many miles apart are the two cities?
 - A 46.875 miles
 B 52 75 miles
- © 93.75 miles
- B 53.75 miles
- D 187.5 miles
- 3 After first entering the ocean, a scuba diver descends to a depth 18 feet below the surface of the water. The diver then ascends 7 feet before descending 18 feet again. What is the final depth of the diver below the surface of the water?
 - ▲ −29 feet
 - B –43 feet
 - © 29 feet
 - D 43 feet

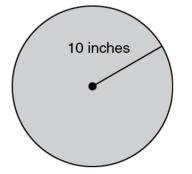
4 The diagram below shows the plans Mr. Barton used to build his garden.



If the perimeter of his garden measures 60 ft, what is the length of one of the sides, *x*?

A 12 ft	© 18 ft
B 15 ft	D 24 ft

5 A pen was attached to a table by a small 10-inch chain. Jason lifted the pen, pulled the chain as far as it would reach, and then drew a circle as shown below.

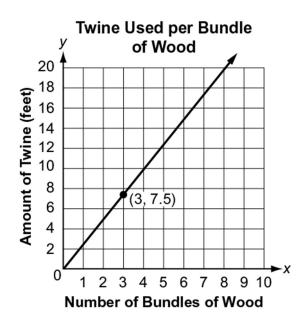


What is the circumference of the circle that Jason drew? Use 3.14 for π .

- A 15.70 inches
- **B** 23.14 inches
- © 31.40 inches
- (D) 62.80 inches
- 6 An employee at a factory is paid \$9.25 per hour plus an \$8.00 bonus for every 20 transformers assembled. Last week an employee worked 36 hours and assembled 380 transformers. How much money did the factory employee actually earn per hour last week rounded to the nearest cent?

A	\$17.25	\odot	\$13.47
B	\$13.64	D	\$12.13

Natasha uses 2.5 feet of twine to tie campfire wood into bundles. The proportional relationship between the number of bundles, *x*, and the amount of twine, *y*, in feet she uses is shown in the graph.



What does the point (3, 7.5) represent in the graph?

- A She uses 7.5 feet of twine to make 7.5 bundles of wood.
- B She uses 7.5 feet of twine to make 3 bundles of wood.
- © She uses 3 feet of twine to make 7.5 bundles of wood.
- D She uses 3 feet of twine to make 3 bundles of wood.

8 Each table shows the number of questions on a quiz and the point value of each quiz given by four different teachers. Which table shows a proportional relationship between the number of questions and the point value?

Mrs. Jacob's Quiz Grading

	Number of Questions	Point Value
A	3	14
0	4	17
	8	29
	12	41

Mr. Weil's Quiz Grading

	Number of Questions	Point Value
(B)	5	13
)	9	25
	13	37
	15	43

Mr. Lee's Quiz Grading

	Number of Questions	Point Value
\bigcirc	4	9
\bigcirc	7	15
	12	25
	20	41

Mrs. Rigg's Quiz Grading

	Number of Questions	Point Value
D	4	20
\bigcirc	6	30
	10	50
	15	75

- 9 Which expression is equivalent to (13x 4) (20x 15)?
 - (Å) 33*x* + 11
 - **B** 33*x* − 19
 - © −7*x* − 19
 - (D) −7x + 11
- 10 A bus traveled 120 miles on a highway in $2\frac{1}{2}$ hours. If the bus traveled at a constant speed, what was the speed of the bus in miles per hour?
 - (A) 40 mph
 - B 45 mph
 - C 48 mph
 - D 50 mph

Name

Summer Packet 2025 Entering 8th Grade

Computations

Write all answers on the lines provided.

There are 10 roses and 14 sunflowers in <u>a garden</u>. Write a ratio for the statements below. Remember to simplify. 2. Sunflowers to total flowers _____ 1. Roses to sunflowers _____ 3. Roses to total flowers _____

5. $\frac{2}{4} = \frac{8}{6}$ 4. $\frac{n}{6} = \frac{51}{102}$ 7. $\frac{10}{8} = \frac{x}{10}$ _____ 6. $\frac{7}{5} = \frac{q}{3}$

Find the unknown value in the proportion. (Hint: Cross products)

8. The Crayola Crayon Company can make 2400 crayons in 4 minutes. How many crayons can they make in 15 minutes?

Order of Operations

_____ Simplify 9). $(6-3+1+2) \div (5-3+1) =$ 10.) $(5 \times 1) + 3^2 - 2$ 11.) $8 \times (8-8) \div 8$ _____ 12) $2 \div 1 + 2 + 9 \div 9 =$ _____