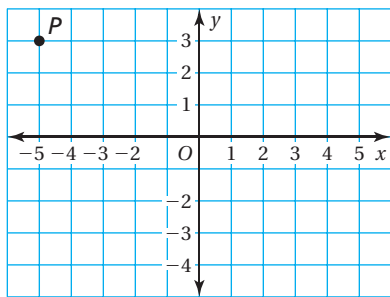1. A football team gains 2 yards on the first play, loses 5 yards on the second play, loses 3 yards on the third play, and gains 4 yards on the fourth play. What is the team's overall gain or loss for all four plays?

   A. a gain of 14 yards   **C.** a loss of 2 yards

   B. a gain of 2 yards   **D.** a loss of 14 yards

2. Point P is plotted in the coordinate plane below.

   What are the coordinates of point P?

   F. $(-5, -3)$ **H.** $(-3, -5)$

   G. $(-5, 3)$ **I.** $(3, -5)$

3. What is the value of the expression below?

   $$17 - (-8)$$

4. Sam was simplifying an expression in the box below.

   $$\left| -8 + 6 + (-3) \right| = \left| -8 \right| + \left| 6 \right| + \left| -3 \right|$$
   $$= 8 + 6 + 3$$
   $$= 17$$

   What should Sam do to correct the error that he made?

   A. Find the absolute value of the sum of 8, 6, and 3 and make that the final answer.

   B. Find the sum of -8, -6, and -3 and make that the final answer.

   C. Find the sum of -8, 6, and -3 and make that the final answer.

   D. Find the absolute value of the sum of -8, 6, and -3 and make that the final answer.

5. The expression below can be used to find the temperature in degrees Celsius when given F, the temperature in degrees Fahrenheit.

$$\frac{5}{9}(F - 32)$$

What is the temperature in degrees Celsius, to the nearest degree, when the temperature in degrees Fahrenheit is 27°?

F. $-33°$ **H.** $-5°$

G. $-17°$ **I.** $-3°$

6. What is the missing number in the sequence below?

$$39, 24, 9, \underline{\quad}, -21$$

7. Which equation is *not* true for all numbers n?

A. $-n + 0 = -n$ **C.** $n - 0 = -n$

B. $n \cdot (-1) = -n$ **D.** $-n \cdot 1 = -n$

8. What is the area of the semicircle below? (Use 3.14 for π.)

⊢ 6 cm ⊣

F. 18.84 in.^{2} **H.** 56.52 in.^{2}

G. 37.68 in.^{2} **I.** 226.08 in.^{2}

9. The campers at a summer camp held a contest in which they had to run across a field carrying buckets of water that were full at the beginning. The team who lost the least water from its bucket was the winner.

- Team A *lost* 40% of the water from its bucket.
- Team B *lost* 0.3 of the water from its bucket.
- Team C *kept* $\frac{5}{8}$ of the water in its bucket.
- Team D *kept* 67% of the water in its bucket.

Which team was the winner?

A. Team A   **C.** Team C

B. Team B   **D.** Team D

10. Which integer is closest to the value of the expression below?

$$-5.04 \cdot (16.89 - 20.1)$$

    F. -105 **H.** 15
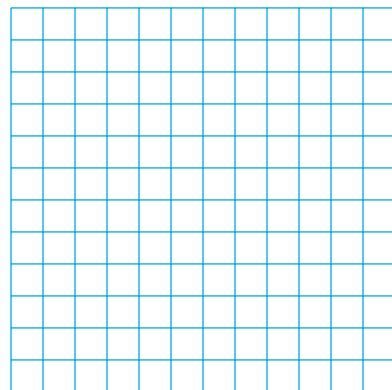
    G. -15 **I.** 105

11. Answer the following questions in the coordinate plane.

Think
Solve
Explain

    Part A   Draw an *x*-axis and *y*-axis in the coordinate plane. Then plot and label the point $(2, -3)$.

    Part B   Plot and label *four* points that are 3 units away from $(2, -3)$.

12. What is the mean of the data set in the box below?

$$-8, -6, -2, 0, -6, -8, 4, -7, -8, 1$$

    A. -8 **C.** -6

    B. -7 **D.** -4

13. Jane and Manuel measured the lengths of their pet rats.

    ● Jane's pet rat   ● Manuel's pet rat

       ○ Body length: $10\frac{1}{2}$ inches   ○ Body length: $9\frac{5}{8}$ inches

       ○ Tail length: $7\frac{3}{4}$ inches   ○ Tail length: $8\frac{1}{4}$ inches

The total length of each rat is determined by the sum of its body length and its tail length. Whose rat has the longer total length and by how much?

    F. Jane's rat is longer by $\frac{3}{8}$ inch.   **H.** Manuel's rat is longer by $\frac{5}{8}$ inch.

    G. Jane's rat is longer by $\frac{1}{6}$ inch.   **I.** Manuel's rat is longer by $\frac{1}{4}$ inch.