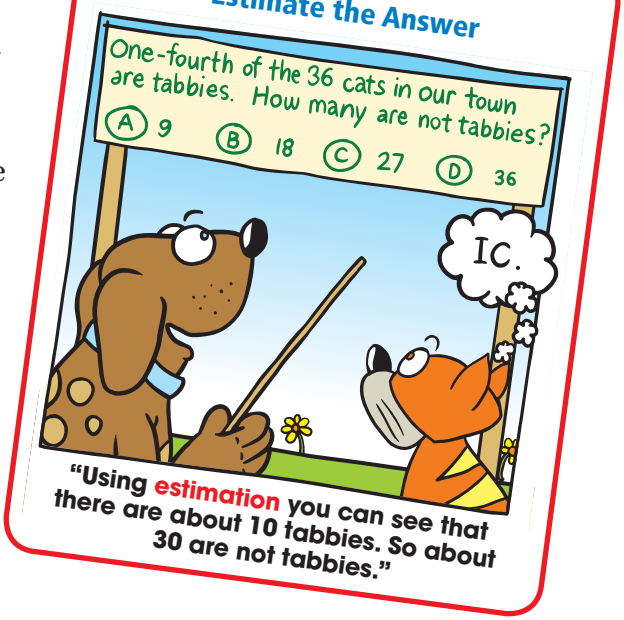
English Spanish

2 Standardized Test Practice

Test-Taking Strategy

Estimate the Answer



1. When José and Sean were each 5 years old, José was $1\frac{1}{2}$ inches taller than Sean. José grew at an average rate of $2\frac{3}{4}$ inches per year from the time that he was 5 years old until the time he was 13 years old. José was 63 inches tall when he was 13 years old. How tall was Sean when he was 5 years old?

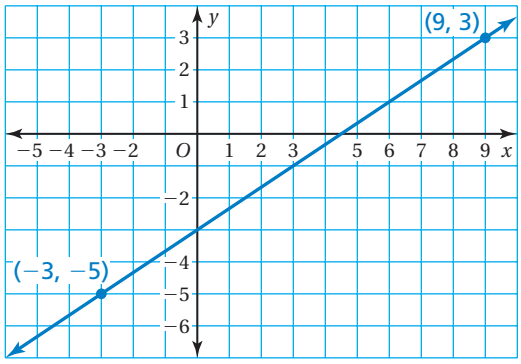
A. $39\frac{1}{2}$ in.

B. $42\frac{1}{2}$ in.

C. $44\frac{3}{4}$ in.

D. $47\frac{3}{4}$ in.

2. A line is graphed in the coordinate plane below.



Which point is *not* on the line?

F. $(-3, 0)$

G. $(0, -3)$

H. $(3, -1)$

I. $(6, 1)$

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

$$\frac{9}{16},\ -\frac{9}{8},\ \frac{9}{4},\ -\frac{9}{2},\ 9,\ \_\_\_\_$$

4. What is the value of the expression below?

$$\left|-2-(-2.5)\right|$$

A. -4.5

B. -0.5

C. 0.5

D. 4.5

5. Which equation is equivalent to the equation shown below?

$$-\frac{3}{4}x + \frac{1}{8} = -\frac{3}{8}$$

F. $-\frac{3}{4}x = -\frac{3}{8} - \frac{1}{8}$

G. $-\frac{3}{4}x = -\frac{3}{8} + \frac{1}{8}$

H. $x + \frac{1}{8} = -\frac{3}{8} \cdot \left(-\frac{4}{3}\right)$

I. $x + \frac{1}{8} = -\frac{3}{8} \cdot \left(-\frac{3}{4}\right)$

6. What is the value of the expression below?

$$-5 \div 20$$

7. Karina was solving the equation in the box below.

$$-96 = -6(15 - 2x)$$
$$-96 = -90 - 12x$$
$$-96 + 90 = -90 + 90 - 12x$$
$$-6 = -12x$$
$$\frac{-6}{-12} = \frac{-12x}{-12}$$
$$\frac{1}{2} = x$$

What should Karina do to correct the error that she made?

A. First add 6 to both sides of the equation.

B. First add $2x$ to both sides of the equation.

C. Distribute the -6 to get $90 - 12x$.

D. Distribute the -6 to get $-90 + 12x$.

8. Current, voltage, and resistance are related according to the formula below, where I represents the current, in amperes, V represents the voltage, in volts, and R represents the resistance, in ohms.

$$I = \frac{V}{R}$$

What is the voltage when the current is 0.5 ampere and the resistance is 0.8 ohm?

F. 4.0 volts

G. 1.3 volts

H. 0.4 volt

I. 0.3 volt

9. What is the area of a triangle with a base length of $2\frac{1}{2}$ inches and a height of 3 inches?

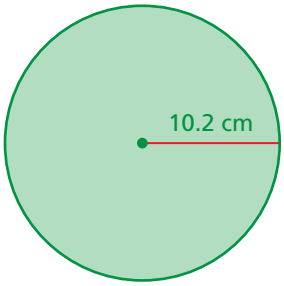
A. $2\frac{3}{4}$ in.^{2}

B. $3\frac{3}{4}$ in.^{2}

C. $5\frac{1}{2}$ in.^{2}

D. $7\frac{1}{2}$ in.^{2}

10. What is the circumference of the circle below? (Use 3.14 for π.)



F. 64.056 cm

G. 60.028 cm

H. 32.028 cm

I. 30.028 cm

11. Four points are graphed on the number line below.

Think Solve Explain

Part A Choose the two points whose values have the greatest sum. Approximate this sum. Explain your reasoning.

Part B Choose the two points whose values have the greatest difference. Approximate this difference. Explain your reasoning.

Part C Choose the two points whose values have the greatest product. Approximate this product. Explain your reasoning.

Part D Choose the two points whose values have the greatest quotient. Approximate this quotient. Explain your reasoning.

12. What number belongs in the box to make the equation true?

$$\frac{-0.4}{\square} + 0.8 = -1.2$$

A. 1

B. 0.2

C. -0.2

D. -1