

Unit 1 Review

Megan has 25 phone numbers stored in her cell phone. Abby has some phone numbers stored in her cell phone. Together they have a total of 61 phone numbers stored.

If n = the number of phone numbers Abby has stored in her cell phone, which mathematical sentence expresses the information above?

- A. $n + 25 = 61$
- B. $n + 25 > 61$
- C. $n + 61 = 25$
- D. $n + 61 > 25$

Which number belongs to the solution set of the equation below?

$$x + 6 = 24$$

- A. 12
- B. 18
- C. 20
- D. 30

Which numbers below belong to the solution set of the inequality?

Check all that apply.

$$6x \leq 66$$

- A.** 12
- B.** 9
- C.** 53
- D.** 11
- E.** 7
- F.** 50

Use the guess-and-check method to solve this equation.

$$2x + 8 = 6x - 12$$

- A.** $x = 3$
- B.** $x = 4$
- C.** $x = 5$
- D.** $x = 6$

What is the solution to this equation?

$$x + 8 = -3$$

- A.** $x = 11$
- B.** $x = 5$
- C.** $x = -5$
- D.** $x = -11$

What is the solution to this equation?

$$x - 16 = 9$$

- A.** $x = 25$
- B.** $x = 7$
- C.** $x = -7$
- D.** $x = -25$

What is the solution to this inequality?

$$x - 8 > -3$$

- A.** $x < -11$
- B.** $x > -11$
- C.** $x < 5$
- D.** $x > 5$

What is the solution to this inequality?

$$14 + x \leq 26$$

- A.** $x \leq 12$
- B.** $x \geq 12$
- C.** $x \leq 40$
- D.** $x \geq 40$

What is the solution to this equation?

$$\frac{x}{-5} = 15$$

- A.** $x = -75$
- B.** $x = -3$
- C.** $x = 3$
- D.** $x = 75$

What is the solution to this equation?

$$\sqrt{x} = 8$$

- A.** $x = 16$
- B.** $x = 32$
- C.** $x = 64$
- D.** $x = 96$

Which of the numbers listed below are solutions to the equation?

Check all that apply.

$$x^2 = 14$$

- A.** -196
- B.** 7
- C.** $-\sqrt{14}$
- D.** -7
- E.** $\sqrt{14}$
- F.** 196