

Independent Practice

Expressions and Operations

A.2c, A.4c

Read and solve.

- Which is the complete factorization of the trinomial $x^2 - x - 12$?
 - $(x + 3)(x - 4)$
 - $(x - 3)(x + 4)$
 - $(x + 6)(x - 2)$
 - $(x + 12)(x - 1)$
- Which is the complete factorization of the trinomial $3x^2 + 10x - 8$?
 - $(3x + 2)(x - 4)$
 - $(x + 2)(3x - 4)$
 - $(x - 2)(3x + 4)$
 - $(3x - 2)(x + 4)$
- The number of seconds to complete a chemical reaction was determined to be given by the equation $s = 250 - 5T - T^2$ where s is the number of seconds and T is the temperature in degrees Celsius at which the reaction occurred. If a chemical reaction was complete in 200 seconds, what was the temperature at which the reaction occurred?
 - 5°C
 - 7°C
 - 10°C
 - 12°C
- Which is the solution set for the following equation: $x^2 - x - 6 = 0$?
 - $\{-3, 2\}$
 - $\{-2, 3\}$
 - $\{-6, 5\}$
 - $\{-5, 6\}$
- When completely factored, $3x^2 - 48$ equals
 - $3(x^2 - 48)$
 - $3(x^2 + 16)$
 - $3(x - 4)(x + 4)$
 - $(3x - 16)(x + 3)$

Independent Practice--continued

6. When completely factored, $x^2 + x - 12$ is equivalent to---

- A. $(x + 3)(x - 4)$
- B. $(x + 4)(x - 3)$
- C. $(x + 7)(x - 5)$
- D. $(x + 12)(x - 1)$

7. One factor of $5x^2 + 13x - 6$ is---

- A. $5x - 6$
- B. $5x - 1$
- C. $5x - 2$
- D. $5x - 3$

8. Which is the solution set for the equation $x^2 - 8x + 16 = 0$?

- A. $\{2, -6\}$
- B. $\{4, -4\}$
- C. $\{4\}$
- D. $\{-9, 2\}$

9. Which is the solution set for the equation $x^2 + 5x - 6 = 0$?

- A. $\{1, -6\}$
- B. $\{-1, 6\}$
- C. $\{2, -3\}$
- D. $\{-2, 3\}$

10. Which is the solution set for the equation $3x^2 + 7x - 6 = 0$?

- A. $\{-2/3, 3\}$
- B. $\{2/3, -3\}$
- C. $\{1, -6\}$
- D. $\{-1, 6\}$