

SOL Mini-Challenge

Expressions and Operations A.12

Read and solve.

1. Which is the complete factorization of $2x^2 + 5x + 3$?

- A. $(2x + 1)(x + 2)$
- B. $(2x + 1)(x + 3)$
- C. $(2x + 2)(x + 1)$
- D. $(2x + 3)(x + 1)$

2. If the area of a rectangle can be represented by $x^2 - 25$, which could represent its length and width?

- F. $x - 5, x - 5$
- G. $x - 5, x + 5$
- H. $x^2, -25$
- J. $5, 5$

3. Which is the complete factorization of $a^2 - 9a - 36$?

- A. $(a - 3)(a + 12)$
- B. $(a + 3)(a - 12)$
- C. $(a - 4)(a + 9)$
- D. $(a + 4)(a - 9)$

4. Which is the complete factorization of $x^2 - 64$?

- F. $(x - 8)(x - 8)$
- G. $(x + 4)(x - 16)$
- H. $(x + 32)(x - 32)$
- J. $(x - 8)(x + 8)$

5. Which is the complete factorization of $4x^2 + 2x - 12$?

- A. $2(x + 2)(2x - 3)$
- B. $2(x - 2)(2x + 3)$
- C. $2(2x + 3)(x - 2)$
- D. $2(2x - 3)(x + 2)$