

Factoring to Solve Quadratic Equations Exit Quiz

Part A Instructions: Choose the option that completes the sentence or answers the question.

1. If $ab = 0$, then $a = 0$ or $b = 0$. This property is known as:

- a. Commutative property
- b. Zero property
- c. Zero-product property
- d. Associative property

2. In the middle-term breaking method, the middle term of the quadratic expression is re-written as two terms such that:

- a. The algebraic sum of two terms is equal to the middle term.
- b. The algebraic product of two terms is equal to the product of the quadratic term and the constant term.
- c. Both a and b
- d. None of these

3. The solution of $x^2 - 9x - 36 = 0$ is:

- a. $x = 4, -9$
- b. $x = 4, 9$
- c. $x = 3, -9$
- d. $x = -3, 12$

4. The solution of $81x^2 - 9 = 0$ is:

- a. $x = \pm \frac{1}{2}$
- b. $x = \pm \frac{1}{3}$
- c. $x = \pm \frac{1}{9}$
- d. $x = \pm 9$

Part B Instructions: Answer the question below.

Find the solution of $2x^2 - 18x - 72 = 0$.

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ANSWERS: Part A Instructions: Choose the option that completes the sentence or answers the question.

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Part B Instructions: Answer the question below.

5. Find the solution of $2x^2 - 18x - 72 = 0$.

$$x^2 - 9x - 36 = 0$$

$$x^2 - 12x + 3x - 36 = 0$$

$$x(x - 12) + 3(x - 12) = 0$$

$$(x + 3)(x - 12) = 0$$

$$x = -3 ; x = 12$$