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(Quiz) Factoring Quadratic Equations

For Multiple Choice(MC) problems choose the best answer. Choose one and only one answer.

(1) What are the solutions to the equation $x^2 + 5x = 36$?

- ◯ $x = 4$ or $x = -9$
- ◯ $x = 6$ or $x = -6$
- ◯ $x = -3$ or $x = 12$
- ◯ $x = -4$ or $x = 9$
- ◯ $x = 3$ or $x = -12$

(2) What are the solutions to the equation $2x^2 - 3x = 5$?

- ◯ $x = -0.5$ or $x = 5$
- ◯ $x = -1$ or $x = 5$
- ◯ $x = 1$ or $x = -2.5$
- ◯ $x = 1$ or $x = 5$
- ◯ $x = -1$ or $x = 2.5$

(3) What are the solutions to the equation $x^2 + 3x - 6 = 12$?

- ◯ $x = -1$ or $x = 4$
- ◯ $x = 1$ or $x = -4$
- ◯ $x = -3$ or $x = 6$
- ◯ $x = 3$ or $x = -6$
- ◯ $x = -3$ or $x = 2$

(4) What are the solutions to the equation $-x^2 + 7x = 12$?

- ◯ $x = 7$ or $x = 12$
- ◯ $x = -7$ or $x = -12$
- ◯ $x = 3$ or $x = 4$
- ◯ $x = -3$ or $x = 4$
- ◯ $x = -3$ or $x = 4$

(5) The length of time required by a high-speed printer to print a large set of documents is given by the equation

$$x^2 - 3x - 54 = 0$$

where x is the time in hours. How many hours are required to print the set of documents?

- ◯ 2 hr
- ◯ 3 hr
- ◯ 6 hr
- ◯ 9 hr
- ◯ 18 hr

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(6) What are the solutions to the equation $x^2 + 6x - 7 = 0$?

- ◯ $x = -7$ or $x = 1$
- ◯ $x = 1$ or $x = 7$
- ◯ $x = -1$ or $x = 7$
- ◯ $x = -1$ or $x = -7$
- ◯ $x = 6$ or $x = -7$

(8) What are the solutions to the equation $3x^2 - 27 = 0$?

- ◯ $x = 3$ or $x = -3$
- ◯ $x = -3$ or $x = \frac{1}{3}$
- ◯ $x = 9$ or $x = -9$
- ◯ $x = 9$ or $x = -3$
- ◯ $x = \frac{1}{3}$ or $x = 9$

(9) What are the solutions to the equation $x^2 + 7x = -12$?

- ◯ $x = -3$ or $x = 4$
- ◯ $x = 6$ or $x = 2$
- ◯ $x = -3$ or $x = -4$
- ◯ $x = -6$ or $x = 2$
- ◯ $x = 3$ or $x = -4$

(10) What are the solutions to the equation $2x^2 + 5x - 12 = 0$?

- ◯ $x = -\frac{3}{2}$ or $x = -4$
- ◯ $x = -\frac{3}{2}$ or $x = 4$
- ◯ $x = 3$ or $x = 4$
- ◯ $x = \frac{3}{2}$ or $x = -4$
- ◯ $x = 6$ or $x = 2$