

PRINTABLE VERSION

Quiz 3

Question 1

Solve the equation: $100x^2 - 81 = 0$

- a) $x = -\frac{81}{100}, x = \frac{81}{100}$
- b) $x = -\frac{9}{10}, x = \frac{9}{10}$
- c) $x = \frac{9}{10}$
- d) $x = -\frac{81}{100}$
- e) $x = -\frac{9}{10}$
- f) None of the above.

Question 2

Use completing the square to rewrite the equation: $x^2 + 8x - 3 = 0$

- a) $(x + 4)^2 = 19$
- b) $(x - 4)^2 = 19$
- c) $(x + 8)^2 = 16$
- d) $(x - 4)^2 = 35$
- e) $(x + 4)^2 = 35$
- f) None of the above.

Question 3

Select the equation which is equivalent to: $6x^2 + 42x + 72 = 0$

- a) $(x + 4)(x - 3) = 0$
- b) $(x - 4)(x - 3) = 0$
- c) $(x + 3)(x + 2) = 0$
- d) $(x + 3)(x + 4) = 0$
- e) $(x + 3)(x - 4) = 0$
- f) None of the above.

Question 4

Solve the equation: $x^2 + 7x + 6 = 0$

- a) $x = 1, x = 6$
- b) $x = -1, x = -6$
- c) $x = -1, x = 6$
- d) $x = 1, x = -6$
- e) $x = -1, x = -7$
- f) None of the above.

Question 5

Use factoring to solve the equation: $3x^2 - x - 10 = 0$

- a) $x = \frac{5}{3}, x = -2$
- b) $x = -\frac{5}{3}, x = 2$
- c) $x = -\frac{5}{3}, x = -2$
- d) $x = -\frac{2}{3}, x = 5$
- e) $x = \frac{5}{3}, x = 2$
- f) None of the above.

Question 6

Use the quadratic formula to solve the equation: $6x^2 + 2x - 2 = 0$

- a) $x = \frac{1}{6} - \frac{\sqrt{13}}{6}, x = \frac{1}{6} + \frac{\sqrt{13}}{6}$
- b) $x = -\frac{1}{3} - \frac{\sqrt{13}}{3}, x = -\frac{1}{3} + \frac{\sqrt{13}}{3}$
- c) $x = -\frac{1}{6} - \frac{\sqrt{13}}{6}, x = \frac{1}{6} + \frac{\sqrt{13}}{6}$
- d) $x = -\frac{1}{6} - \frac{\sqrt{13}}{6}, x = -\frac{1}{6} + \frac{\sqrt{13}}{6}$
- e) $x = \frac{1}{6} - \frac{\sqrt{13}}{6}, x = -\frac{1}{6} + \frac{\sqrt{13}}{6}$
- f) None of the above.

Question 7

Solve the equation: $x^2 - 6x = -8$

- a) $x = -2, x = -4$
- b) $x = 2, x = 2$
- c) $x = -2, x = 4$
- d) $x = 2, x = 4$
- e) $x = 2, x = -4$
- f) None of the above.

Question 8

Rewrite the equation by completing the square: $x^2 + 2x - 4 = 0$

- a) $(x + 1)^2 = 5$
- b) $(x - 1)^2 = 8$
- c) $(x + 1)^2 = 4$

- d) $(x + 2)^2 = 8$
- e) $(x - 1)^2 = 4$
- f) None of the above.

Question 9

A right triangle's height is 3 times the length of its base. If the area of the triangle is 96, what is the height?

- a) 24
- b) 26
- c) 25
- d) 20
- e) 21
- f) None of the above.

Question 10

You need to order carpet for a room that has a length that is twice its width. If the area of the room is 288, find the width of the room.

- a) 10
- b) 13
- c) 16
- d) 12
- e) 14
- f) None of the above.