

Pre-Calculus 11 - VLN

Chapter 3: Quadratic Equations

Lesson 1: Solving Quadratics by Graphing

Question #1

Reference Q.20381

Determine the solutions of the following equation by creating two separate equations:

$$-2x^2 + x - 4 = x - 6$$

Question #2

Reference Q.20382

Determine the solution(s) of the following equation by creating two separate equations. Give answer accurate to two decimal places:

$$-x = x^2 - 2x - 1$$

Question #3

Reference Q.20383

- a. Determine the solution(s) of the following equation by creating two separate equations:

$$-x^2 + 3 = 2x + 4$$

- b. Verify your solution by substituting the intersection point back into the equation.

Question #4

Reference Q.20384

- a. Determine the solution(s) of the following equation by creating two separate equations. Give answer accurate to two decimal places:

$$3(x - 4)^2 + 3.2 = 0.25x^2 + 4.5$$

- b. Verify one of your solutions by substituting the intersection point back into the equation.

Question #5

Reference Q.20385

Determine the solution(s) of the following equation by combining into one equation and graphing the result:

$$x^2 + 1 = 10$$

Question #6

Reference Q.20386

Determine the solution(s) of the following equation by combining into one equation and graphing the result. Give answer accurate to two decimal places:

$$-x^2 + 2 = x - 1$$

Question #7

Reference Q.20387

- a. Determine the solution(s) of the following equation by combining into one equation and graphing the result:

$$4x - 1 = 2x^2 + 4x - 1$$

- b. Verify your solution algebraically.

Question #8

Reference Q.20388

- a. How many solutions does the following equation have:

$$x^2 + 2x - 5 = -x^2 - 10x - 25?$$

Prove your answer by combining the equations and graphing the result.

- b. Prove your answer by graphing both sides of the equation separately, but on the same grid.