

Algebra 2: Homework 48

Solve by completing the square:

1. $x^2 - 6x + 8 = 0$

2. $x^2 - 4x = 7$

Solve by using the quadratic formula:

3. $2x^2 - 5x = 10$

4. $7x^2 = 3 - x$

5. Write the quadratic function $g(x) = 3x^2 + 6x + 2$ in vertex form, state the coordinates of the vertex, and state whether the vertex is a maximum or a minimum.

6. Determine whether each relation is a function:

a. $\{(1,5), (2,5), (3,5), (4,5)\}$

b. $\{(1,5), (5,1), (2,5), (3,1)\}$

c. $\{(1,2), (1,3), (1,4), (1,5)\}$