Solve by taking the square root.

1.
$$(x-5)^2 = 27$$

2.
$$2(x+1)^2 - 3 = 17$$

Complete the square to form a perfect square trinomial and then <u>factor</u> the trinomial.

3.
$$x^2 - 3x$$

4.
$$x^2 - 10x$$

Solve by completing the square.

5.
$$x^2 - 2x - 1 = 0$$

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

7.
$$2x^2 - 4x - 8 = 0$$

8.
$$3x^2 - 12x = 3$$

Solve by completing the square.

9.
$$2x^2 - 6x = 21$$

$$10.\,5x^2 + 25x = -15$$

Word Problem.

11. A rectangular deck has an area of 320 ft^2 . The length of the deck is 4 feet longer than the width. Find the dimensions of the deck. Solve by completing the square.