Solve each equation by taking the square root of each side. Round to the nearest tenth if necessary.

1)
$$b^2 - 4b + 4 = 16$$

2)
$$g^2 - 8g + 16 = 2$$

Find the value of *c* that makes each trinomial a perfect square.

3)
$$s^2 - 16s + c$$

4)
$$p^2 - 7p + c$$

Solve each equation by completing the square. Round to the nearest tenth if necessary.

5)
$$s^2 - 4s - 12 = 0$$

6)
$$d^2 + 20d + 11 = 200$$

7)
$$x^2 + 4x + 3 = 0$$

8)
$$9r^2 - 42r = -49$$

9)
$$5x^2 - 10x = 23$$

$$10) d^2 - 8d + 7 = 0$$

$$11)4h^2 - 20h + 25 = 0$$

$$12) \, 9w^2 - 12w - 1 = 0$$