

**Practice 10-6****Completing the Square**

.....  
**Find the value of  $c$  such that each expression is a perfect square trinomial.**

1.  $x^2 - 14x + c$

2.  $x^2 - \frac{2}{9}x + c$

3.  $x^2 - \frac{4}{9}x + c$

4.  $x^2 - \frac{2}{6}x + c$

**Solve each equation by completing the square.**

5.  $x^2 - 4x = 5$

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

7.  $x^2 - 6x = 10$

8.  $x^2 + 4x + 4 = 0$

9.  $x^2 - 3x = 18$

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

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

12.  $x^2 - 6x = 8$

13.  $x^2 - 7x = 0$

14.  $x^2 + 4x - 12 = 0$

15.  $x^2 + 11x + 10 = 0$

16.  $x^2 + 2x = 15$

17.  $x^2 - 8x = 9$

18.  $x^2 + 5x = -6$

19.  $x^2 - 2x = 120$

20.  $x^2 - 22x = -105$

21.  $2x^2 = 3x + 9$

22.  $2x^2 + 8x - 10 = 0$

23.  $2x^2 - 3x - 2 = 0$

24.  $2x^2 + 12x - 32 = 0$

25.  $3x^2 + 17x - 6 = 0$

26.  $2x^2 - x - 28 = 0$

27.  $3x^2 - 4x + 1 = 0$

28.  $2x^2 - 5x - 3 = 0$

29.  $6x^2 - 2x = 28$

30.  $2x^2 - 16x = -30$

31.  $4x^2 = -2x + 12$

32.  $9x^2 + 6x = 3$

33.  $10x^2 + 3x = 4$

34.  $12x^2 - 29x + 15 = 0$