

Solving Quadratics by Completing the Square *fluency*

 **Solve. Give exact answers.**

1 $(x + 3)^2 = 5$

2 $(x - 2)^2 = 7$

3 $(x + 1)^2 = 12$

4 $(x - 5)^2 = 18$

5 $(x + 4)^2 = 3$

6 $(x - 6)^2 = 20$

 **Solve by completing the square. Give exact answers.**

7 $x^2 + 6x + 2 = 0$

8 $x^2 - 4x - 1 = 0$

9 $x^2 + 10x + 7 = 0$

10 $x^2 - 8x + 13 = 0$

11 $x^2 + 2x - 5 = 0$

12 $x^2 - 12x + 6 = 0$

 **Solve by completing the square. Give exact answers.**

13 $x^2 + 3x + 1 = 0$

14 $x^2 - 5x + 2 = 0$

15 $x^2 + x - 3 = 0$

16 $x^2 - 7x + 5 = 0$

17 $x^2 + 9x + 4 = 0$

18 $x^2 - 3x - 5 = 0$

 **Solve by completing the square. Give exact answers.**

19 $2x^2 + 8x + 3 = 0$

20 $3x^2 - 6x - 1 = 0$

21 $2x^2 - 4x - 7 = 0$

22 $2x^2 + 6x + 1 = 0$

23 $4x^2 + 8x - 1 = 0$

24 $3x^2 - 12x + 2 = 0$

 **Solve by completing the square. Give your answers to 2 decimal places.**

25 $x^2 + 4x - 3 = 0$

26 $x^2 - 6x + 2 = 0$

27 $x^2 + 5x + 1 = 0$

28 $2x^2 + 4x - 9 = 0$

29 $x^2 - 3x - 7 = 0$

30 $3x^2 + 6x - 2 = 0$