

Completing the Square (#39)

What values should be placed in the blanks to make each quadratic trinomial a perfect square?

1.  $x^2 + 10x + \underline{\hspace{1cm}}$

2.  $x^2 - 8x + \underline{\hspace{1cm}}$

3.  $x^2 - \underline{\hspace{1cm}} + 4$

4.  $x^2 + 6x + \underline{\hspace{1cm}}$

5.  $x^2 + \underline{\hspace{1cm}} + 1$

6.  $x^2 - 7x + \underline{\hspace{1cm}}$

7.  $x^2 + \underline{\hspace{1cm}} + 49$

8.  $x^2 - 12x + \underline{\hspace{1cm}}$

9.  $x^2 + \underline{\hspace{1cm}} + 0.25$

10.  $3x^2 + 6x + \underline{\hspace{1cm}}$

11.  $2x^2 + \underline{\hspace{1cm}} + 8$

12.  $6x^2 - 18x + \underline{\hspace{1cm}}$

Solve by completing the square.

13.  $x^2 - 2x + 3 = 0$

14.  $x^2 - 2x - 8 = 0$

15.  $x^2 + 2x - 33 = 0$

16.  $x^2 - 2x - 48 = 0$

17.  $x^2 - 22x + 26 = 0$

18.  $x^2 + 12x + 20 = 0$

$$19. x^2 - 8x + 21 = 6$$

$$20. x^2 + 10x + 14 = -7$$

$$21. x^2 - 2x = 3$$

$$22. 4x^2 + 16x = 65$$

$$23. 7x^2 - 14x - 56 = 0$$

$$24. 2x^2 + 12x + 10 = 0$$

$$25. 5x^2 + 19x - 69 = -2$$

$$26. 3x^2 + 20x + 36 = 4$$