

Assignment

Date _____ Period _____

Find the value that completes the square and then rewrite as a perfect square.

1) $x^2 - \frac{67}{19}x + \underline{\hspace{1cm}}$

2) $m^2 + 26m + \underline{\hspace{1cm}}$

3) $m^2 - 42m + \underline{\hspace{1cm}}$

Put each equation into Vertex Form by completing the square.

4) $v^2 - 10v - 10 = 0$

5) $p^2 - 18p + 30 = 0$

6) $9b^2 - 18b - 27 = 0$

7) $3x^2 - 12x - 26 = 0$

Solve each equation by completing the square.

8) $k^2 - 2k - 100 = 0$

9) $a^2 - 10a + 85 = 0$

10) $k^2 - 10k + 59 = 0$

11) $a^2 - 2a + 78 = 0$

12) $n^2 - 6n - 72 = 0$

13) $n^2 + 8n + 92 = 10n$

14) $-b^2 + 22b + 131 = -2b^2 - 11$

15) $v^2 + 18v - 81 = 6v$

16) $n^2 + 63 = 14n$

17) $4b = -59 - b^2$

18) $9a^2 - 28a = 8a^2 - 95 - 10a$

19) $18p^2 - 16p = -56 + 10p^2$