

Solving Quadratic Equations Using All Methods

Date _____ Period _____

Solve each equation by factoring.

1) $x^2 - 8x + 16 = 0$

2) $2n^2 - 18n + 40 = 0$

3) $x^2 - 49 = 0$

4) $3x^2 - 75 = 0$

5) $5k^2 - 9k + 18 = 4k^2$

6) $x^2 - x - 6 = -6 - 7x$

7) $3a^2 = -11a - 6$

8) $14n^2 - 5 = 33n$

9) $5k^2 + 28 = 27k$

10) $3n^2 - 5n = 8$

Solve each equation by taking square roots.

11) $-8 - 5n^2 = -88$

12) $4 - 2a^2 = -7$

13) $5n^2 - 2 = -92$

14) $(m + 8)^2 = 72$

Solve each equation by completing the square.

15) $r^2 - 8r - 22 = 6$

16) $k^2 - 18k + 8 = -9$

17) $x^2 + 14x + 96 = 0$

18) $a^2 - 10a + 52 = 0$

19) $x^2 - 12x - 17 = 0$

20) $x^2 + 20x + 28 = 9$

Solve each equation with the quadratic formula.

21) $4v^2 + 7v - 7 = 0$

22) $-8b^2 - 3b + 22 = 0$

23) $5x^2 + 4x - 15 = 0$

24) $9x^2 - 12x + 12 = 0$

25) $11r^2 + 7r = 3$

26) $r^2 = -8r + 65$