

Solving Quadratic Equations Skills Review

Date _____ Period _____

Solve each equation by factoring.

1) $v^2 + 7v + 12 = 0$

2) $x^2 + 4x - 32 = 0$

3) $3b^2 + 18b = 0$

4) $3v^2 + 24v = 0$

5) $7a^2 + 14a - 21 = 0$

6) $4n^2 - 60n + 224 = 0$

Solve each equation with the quadratic formula.

7) $v^2 + 4v - 96 = 0$

8) $v^2 - 5v - 14 = 0$

9) $x^2 - 12x - 13 = 0$

10) $7x^2 - 15 = 0$

11) $5x^2 - 9x - 44 = 0$

12) $2x^2 + 11x - 138 = 0$

Solve each equation by taking square roots.

13) $x^2 = 16$

14) $b^2 - 25 = 0$

15) $r^2 - 49 = 0$

16) $a^2 - 4 = 60$

17) $p^2 + 1 = 37$

18) $v^2 + 6 = 10$

Solve each equation by completing the square.

19) $k^2 - 8k - 48 = 0$

20) $x^2 - 14x - 51 = 0$

21) $n^2 + 10n - 10 = 0$

22) $2x^2 - 12x + 16 = 0$

23) $7n^2 - 14n - 83 = 0$

24) $3a^2 + 18a + 24 = 0$

Answers to Solving Quadratic Equations Skills Review

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|--------------------------|-------------------------|-------------------------|--------------------|
| 1) $\{-3, -4\}$ | 2) $\{-8, 4\}$ | 3) $\{-6, 0\}$ | 4) $\{-8, 0\}$ |
| 5) $\{-3, 1\}$ | 6) $\{8, 7\}$ | 7) $\{8, -12\}$ | 8) $\{7, -2\}$ |
| 9) $\{13, -1\}$ | 10) $\{1.464, -1.464\}$ | 11) $\{4, -2.2\}$ | 12) $\{6, -11.5\}$ |
| 13) $\{4, -4\}$ | 14) $\{5, -5\}$ | 15) $\{7, -7\}$ | 16) $\{8, -8\}$ |
| 17) $\{6, -6\}$ | 18) $\{2, -2\}$ | 19) $\{12, -4\}$ | 20) $\{17, -3\}$ |
| 21) $\{0.916, -10.916\}$ | 22) $\{4, 2\}$ | 23) $\{4.586, -2.586\}$ | 24) $\{-2, -4\}$ |