

10-1 Quadratic Equations - Solve by Square Rooting_hw

Solve each equation by taking square roots.

1) $x^2 + 1 = 1$

2) $25x^2 = 9$

3) $a^2 - 4 = 0$

4) $p^2 + 4 = 20$

5) $16n^2 = 4$

6) $x^2 + 4 = 32$

7) $m^2 - 5 = 8$

8) $v^2 - 2 = 6$

9) $9x^2 = 16$

10) $5x^2 = 105$

11) $-2v^2 = -24$

12) $k^2 - 8 = 56$

13) $-5n^2 = -20$

14) $k^2 - 1 = 44$

15) $9x^2 = 49$

16) $-8x^2 = -8$

$$17) -2 - 3n^2 = -62$$

$$18) 3p^2 - 2 = 31$$

$$19) 5 - 3r^2 = -34$$

$$20) 4k^2 + 5 = 37$$

$$21) 4a^2 + 5 = 77$$

$$22) 2 - 3p^2 = -61$$

$$23) -4 - 5x^2 = -44$$

$$24) 2 - 2x^2 = -22$$

$$25) 2 - 4p^2 = -82$$

$$26) 5r^2 + 1 = 41$$

$$27) 4x^2 + 5 = 17$$

$$28) 3n^2 - 1 = 29$$

$$29) (x + 1)^2 = 14$$

$$30) (x + 9)^2 = 34$$

$$31) (x + 4)^2 = 36$$

$$32) (x - 13)^2 = 64$$

$$33) (x - 7)^2 = 12$$

$$34) (x - 5)^2 = 20$$

Answers to 10-1 Quadratic Equations - Solve by Square Rooting_hw

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|---|---|--|---------------------------------|
| 1) {0} | 2) $\left\{\frac{3}{5}, -\frac{3}{5}\right\}$ | 3) {2, -2} | 4) {4, -4} |
| 5) $\left\{\frac{1}{2}, -\frac{1}{2}\right\}$ | 6) $\{2\sqrt{7}, -2\sqrt{7}\}$ | 7) $\{\sqrt{13}, -\sqrt{13}\}$ | 8) $\{2\sqrt{2}, -2\sqrt{2}\}$ |
| 9) $\left\{\frac{4}{3}, -\frac{4}{3}\right\}$ | 10) $\{\sqrt{21}, -\sqrt{21}\}$ | 11) $\{2\sqrt{3}, -2\sqrt{3}\}$ | 12) {8, -8} |
| 13) {2, -2} | 14) $\{3\sqrt{5}, -3\sqrt{5}\}$ | 15) $\left\{\frac{7}{3}, -\frac{7}{3}\right\}$ | 16) {1, -1} |
| 17) $\{2\sqrt{5}, -2\sqrt{5}\}$ | 18) $\{\sqrt{11}, -\sqrt{11}\}$ | 19) $\{\sqrt{13}, -\sqrt{13}\}$ | 20) $\{2\sqrt{2}, -2\sqrt{2}\}$ |
| 21) $\{3\sqrt{2}, -3\sqrt{2}\}$ | 22) $\{\sqrt{21}, -\sqrt{21}\}$ | 23) $\{2\sqrt{2}, -2\sqrt{2}\}$ | 24) $\{2\sqrt{3}, -2\sqrt{3}\}$ |
| 25) $\{\sqrt{21}, -\sqrt{21}\}$ | 26) $\{2\sqrt{2}, -2\sqrt{2}\}$ | 27) $\{\sqrt{3}, -\sqrt{3}\}$ | 28) $\{\sqrt{10}, -\sqrt{10}\}$ |
| 29) $\{-1 + \sqrt{14}, -1 - \sqrt{14}\}$ | 30) $\{-9 + \sqrt{34}, -9 - \sqrt{34}\}$ | 31) {2, -10} | 32) {21, 5} |
| 33) {21, 5} | 34) $\{7 + 2\sqrt{3}, 7 - 2\sqrt{3}\}$ | 35) $\{5 + 2\sqrt{5}, 5 - 2\sqrt{5}\}$ | |