

# Solve Quadratics by Finding Square Roots

Name \_\_\_\_\_

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**Solve each equation by taking square roots.**

1)  $10n^2 - 2 = 248$

2)  $7k^2 - 8 = 335$

3)  $7v^2 + 8 = 71$

4)  $3b^2 + 1 = 28$

5)  $10k^2 + 1 = 491$

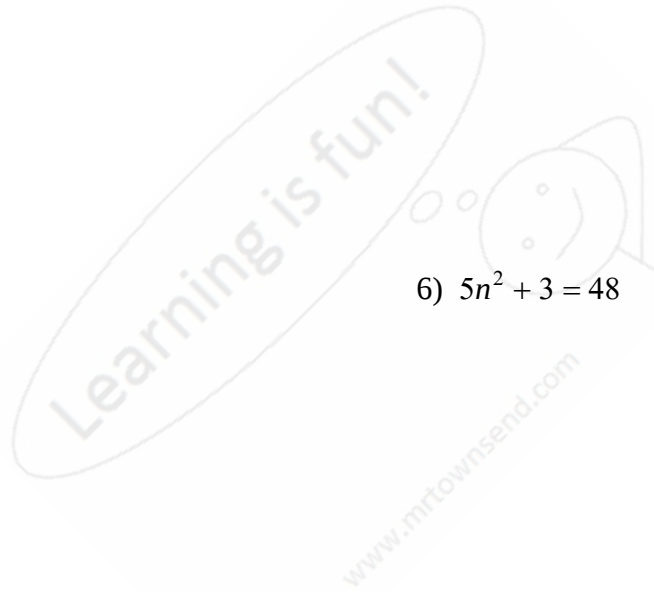
6)  $5n^2 + 3 = 48$

7)  $6x^2 - 2 = 22$

8)  $5b^2 - 10 = 490$

9)  $6p^2 + 10 = 610$

10)  $10v^2 + 3 = 643$



$$11) 5p^2 + 8 = -33$$

$$12) 5v^2 - 4 = 491$$

$$13) 8v^2 + 8 = -18$$

$$14) 3x^2 + 6 = 306$$

$$15) 81n^2 + 8 = 108$$

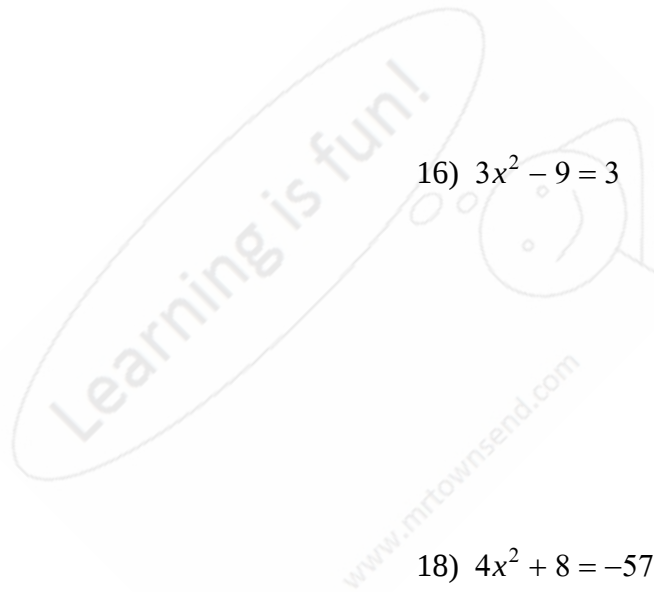
$$16) 3x^2 - 9 = 3$$

$$17) 6 - 8a^2 = -4$$

$$18) 4x^2 + 8 = -57$$

$$19) 10x^2 - 7 = 313$$

$$20) 9k^2 + 4 = 85$$



## Answers to Solve Quadratics by Finding Square Roots

1)  $\{5, -5\}$

5)  $\{7, -7\}$

9)  $\{10, -10\}$

12)  $\{3\sqrt{11}, -3\sqrt{11}\}$

16)  $\{2, -2\}$

20)  $\{3, -3\}$

2)  $\{7, -7\}$

6)  $\{3, -3\}$

10)  $\{8, -8\}$

13)  $\left\{\frac{i\sqrt{13}}{2}, -\frac{i\sqrt{13}}{2}\right\}$

17)  $\left\{\frac{\sqrt{5}}{2}, -\frac{\sqrt{5}}{2}\right\}$

3)  $\{3, -3\}$

7)  $\{2, -2\}$

11)  $\left\{\frac{i\sqrt{205}}{5}, -\frac{i\sqrt{205}}{5}\right\}$

14)  $\{10, -10\}$

18)  $\left\{\frac{i\sqrt{65}}{2}, -\frac{i\sqrt{65}}{2}\right\}$

4)  $\{3, -3\}$

8)  $\{10, -10\}$

15)  $\left\{\frac{10}{9}, -\frac{10}{9}\right\}$

19)  $\{4\sqrt{2}, -4\sqrt{2}\}$

