

Unit 4.4 Solve by taking Square Root Practice

Solve each equation by taking square roots.

1) $n^2 = 0$

{0}

2) $x^2 = 4$

{2, -2}

3) $x^2 + 4 = 85$

{9, -9}

4) $5m^2 = 410$

{ $\sqrt{82}$, $-\sqrt{82}$ }

5) $81k^2 = 64$

{ $\frac{8}{9}$, $-\frac{8}{9}$ }

6) $-4v^2 = -168$

{ $\sqrt{42}$, $-\sqrt{42}$ }

7) $n^2 + 4 = 20$

{4, -4}

8) $2x^2 = 32$

{4, -4}

$$9) -7n^2 = -553$$

$$\{\sqrt{79}, -\sqrt{79}\}$$

$$10) r^2 + 1 = 1$$

$$\{0\}$$

$$11) 7x^2 - 5 = 268$$

$$\{\sqrt{39}, -\sqrt{39}\}$$

$$12) 7a^2 - 8 = 111$$

$$\{\sqrt{17}, -\sqrt{17}\}$$

$$13) 10x^2 + 7 = 607$$

$$\{2\sqrt{15}, -2\sqrt{15}\}$$

$$14) 81n^2 + 8 = 89$$

$$\{1, -1\}$$

$$15) 7x^2 + 10 = 101$$

$$\{\sqrt{13}, -\sqrt{13}\}$$

$$16) -9 - 9x^2 = -846$$

$$\{\sqrt{93}, -\sqrt{93}\}$$

$$17) 4x^2 - 8 = 1$$

$$\left\{\frac{3}{2}, -\frac{3}{2}\right\}$$

$$18) 2 + 36n^2 = 38$$

$$\{1, -1\}$$