# Algebra I Lesson #3 Unit 13 Class Worksheet #3 For Worksheets #4 & #7

**Consider the equations below.** 

**Consider the equations below.** 

 $x^2 = 9$ 

**Consider the equations below.** 

$$x^2 = 9$$
  $x^2 = 49$ 

**Consider the equations below.** 

$$x^2 = 9$$
  $x^2 = 49$   $x^2 = 400$ 

**Consider the equations below.** 

$$x^2 = 9$$
  $x^2 = 49$   $x^2 = 400$ 

**Consider the equations below.** 

$$x^2 = 9$$
  $x^2 = 49$   $x^2 = 400$ 

**Consider the equations below.** 

 $x^2 = 9$  x = 3  $x^2 = 49$  $x^2 = 400$ 

**Consider the equations below.** 



**Consider the equations below.** 

$$x^{2} = 9$$
  
 $x = 3 \text{ or}$   
 $\sqrt{9}$   
 $x^{2} = 49$   
 $x^{2} = 400$ 

**Consider the equations below.** 

 $x^{2} = 9$  x = 3 or x = -3  $\sqrt{9}$   $x^{2} = 49$  $x^{2} = 400$ 

**Consider the equations below.** 

$$x^{2} = 9$$
  
 $x = 3 \text{ or } x = -3$   
 $1 \sqrt{9} -\sqrt{9}$   
 $x^{2} = 49$   
 $x^{2} = 400$ 

**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 

$$x^{2} = 9$$

$$x^{2} = 49$$

$$x^{2} = 400$$

$$x = 3 \text{ or } x = -3$$

$$\uparrow \qquad \uparrow \qquad \uparrow \qquad \uparrow \qquad \uparrow \qquad f$$

$$\sqrt{9} \quad -\sqrt{9}$$

$$\sqrt{49} \quad -\sqrt{49}$$

$$x^{2} = 400$$

$$x = 20$$

$$x = 20$$

**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$ 

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** 

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If x<sup>2</sup> = k

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

 $\frac{\text{The Square Root Property}}{\text{If } x^2 = k \text{ and } k > 0,}$ 

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

The Square Root PropertyIf x² = k and k > 0,This is important.

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

 $\frac{\text{The Square Root Property}}{\text{If } x^2 = k \text{ and } k > 0,}$ 

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \sqrt{k}$ 

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \sqrt{k}$  or

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \sqrt{k}$  or  $x = -\sqrt{k}$ .
**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \sqrt{k}$  or  $x = -\sqrt{k}$ .

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \sqrt{k}$  or  $x = -\sqrt{k}$ .

This can also be written as

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \sqrt{k}$  or  $x = -\sqrt{k}$ .

This can also be written as x =

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \sqrt{k}$  or  $x = -\sqrt{k}$ .

This can also be written as  $x = \pm$ 

**Consider the equations below.** 



Each of these equations has 2 solutions.

These equations take the form  $x^2 = k$  for some <u>positive</u> number k.

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \sqrt{k}$  or  $x = -\sqrt{k}$ .

This can also be written as  $x = \pm \sqrt{k}$ .

**The Square Root Property** If  $x^2 = k$  and k > 0, then  $x = \pm \sqrt{k}$ .

If 
$$x^2 = k$$
 and  $k > 0$ , then  $x = \pm \sqrt{k}$ .

# Solving Second Degree Equations With 1 Variable $ax^2 + bx + c = 0$ where $a \neq 0$ .

If 
$$x^2 = k$$
 and  $k > 0$ , then  $x = \pm \sqrt{k}$ .

#### **Solving Second Degree Equations With 1 Variable**

 $ax^2 + bx + c = 0$  where  $a \neq 0$ .

You have solved second degree equations (also called quadratic equations) using the factoring method.

If  $x^2 = k$  and k > 0, then  $x = \pm \sqrt{k}$ .

### **Solving Second Degree Equations With 1 Variable**

 $ax^2 + bx + c = 0$  where  $a \neq 0$ .

You have solved second degree equations (also called quadratic equations) using the factoring method. The square root property can also be used to solve second degree equations.

If  $x^2 = k$  and k > 0, then  $x = \pm \sqrt{k}$ .

### **Solving Second Degree Equations With 1 Variable**

 $ax^2 + bx + c = 0$  where  $a \neq 0$ .

You have solved second degree equations (also called quadratic equations) using the factoring method. The square root property can also be used to solve second degree equations. This method can only be used if b = 0.

If  $x^2 = k$  and k > 0, then  $x = \pm \sqrt{k}$ .

### **Solving Second Degree Equations With 1 Variable**

 $ax^2 + bx + c = 0$  where  $a \neq 0$ .

You have solved second degree equations (also called quadratic equations) using the factoring method. The square root property can also be used to solve second degree equations. This method can only be used if b = 0. (There is no 'x' term in the equation.)

If  $x^2 = k$  and k > 0, then  $x = \pm \sqrt{k}$ .

### **Solving Second Degree Equations With 1 Variable**

 $ax^2 + bx + c = 0$  where  $a \neq 0$ .

You have solved second degree equations (also called quadratic equations) using the factoring method. The square root property can also be used to solve second degree equations. This method can only be used if b = 0. (There is no 'x' term in the equation.) This lesson is designed to illustrate this process.

1. 
$$x^2 - 25 = 0$$
 2.  $x^2 - 5 = 0$  3.  $x^2 - 8 = 0$ 

1. 
$$x^2 - 25 = 0$$
 2.  $x^2 - 5 = 0$  3.  $x^2 - 8 = 0$ 

**Step 1:** Solve for x<sup>2</sup>.

Algebra I Class Worksheet #3 Unit 13

Solve each of the following using the square root property.

1. 
$$x^2 - 25 = 0$$
 2.  $x^2 - 5 = 0$  3.  $x^2 - 8 = 0$ 

Algebra I Class Worksheet #3 Unit 13

Solve each of the following using the square root property.

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 0$   
2.  $x^2 - 5 = 0$   
3.  $x^2 - 8 = 0$ 

### **Step 1:** Solve for x<sup>2</sup>.

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
3.  $x^2 - 8 = 0$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 - 5 = 0$   
 $x^2 - 8 = 0$   
 $x^2 = 25$ 

**Step 1:** Solve for x<sup>2</sup>.

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
3.  $x^2 - 8 = 0$ 

Algebra I Class Worksheet #3 Unit 13

Solve each of the following using the square root property.

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 0$   
3.  $x^2 - 8 = 0$   
 $x^2 = 0$ 

Algebra I Class Worksheet #3 Unit 13

Solve each of the following using the square root property.

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 = 5$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 = 5$ 

**Step 1:** Solve for x<sup>2</sup>.

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 - 8 = 0$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 = 10$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
 2.  $x^2 - 5 = 0$  3.  $x^2 - 8 = 0$ 

$$x^2 = 25$$
  $x^2 = 5$   $x^2 = 8$ 

**Step 2:** Apply the square root property.

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$ 
2.  $x^2 - 5 = 0$ 
3.  $x^2 - 8 = 0$   
 $x^2 = 5$ 
3.  $x^2 - 8 = 0$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x =$ 
2.  $x^2 - 5 = 0$ 
3.  $x^2 - 8 = 0$   
 $x^2 = 5$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm$ 
2.  $x^2 - 5 = 0$ 
3.  $x^2 - 8 = 0$   
 $x^2 = 5$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$ 
2.  $x^2 - 5 = 0$   
 $x^2 - 8 = 0$   
 $x^2 - 8 = 0$   
 $x^2 = 5$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$   
2.  $x^2 - 5 = 0$   
 $x^2 - 8 = 0$   
 $x^2 = 5$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$ 
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
 $x^2 = 5$   
3.  $x^2 - 8 = 0$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$ 
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
 $x = 1$ 
3.  $x^2 - 8 = 0$   
 $x^2 = 8$   
 $x = 1$
1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$ 
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
 $x = \pm$ 
3.  $x^2 - 8 = 0$   
 $x^2 = 8$   
 $x = \pm$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$ 
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
 $x = \pm \sqrt{5}$ 
3.  $x^2 - 8 = 0$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$   
2.  $x^2 - 5 = 0$   
 $x^2 - 8 = 0$   
 $x^2 = 5$   
 $x = \pm \sqrt{5}$   
3.  $x^2 - 8 = 0$   
 $x^2 = 8$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
 $x = \pm \sqrt{5}$   
3.  $x^2 - 8 = 0$   
 $x^2 = 8$   
 $x = \pm \sqrt{5}$ 

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$ 
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
 $x = \pm \sqrt{5}$ 
3.  $x^2 - 8 = 0$   
 $x^2 = 8$   
 $x = \pm \sqrt{5}$ 
3.  $x^2 - 8 = 0$   
 $x = 100$ 

| 1. $x^2 - 25 = 0$            | 2. $x^2 - 5 = 0$            | 3. $x^2 - 8 = 0$   |
|------------------------------|-----------------------------|--------------------|
| $x^2 = 25$                   | $x^2 = 5$                   | $x^2 = 8$          |
| $\mathbf{x} = \pm \sqrt{25}$ | $\mathbf{x} = \pm \sqrt{5}$ | $\mathbf{x} = \pm$ |

| 1. $x^2 - 25 = 0$   | 2. $x^2 - 5 = 0$   | 3. $x^2 - 8 = 0$            |
|---------------------|--------------------|-----------------------------|
| $x^2 = 25$          | $x^2 = 5$          | $x^2 = 8$                   |
| $x = \pm \sqrt{25}$ | $x = \pm \sqrt{5}$ | $\mathbf{x} = \pm \sqrt{8}$ |

1. 
$$x^2 - 25 = 0$$
  
 $x^2 = 25$   
 $x = \pm \sqrt{25}$   
2.  $x^2 - 5 = 0$   
 $x^2 = 5$   
 $x = \pm \sqrt{5}$   
3.  $x^2 - 8 = 0$   
 $x^2 = 8$   
 $x = \pm \sqrt{8}$ 

| 1. $x^2 - 25 = 0$            | 2. $x^2 - 5 = 0$   | 3. $x^2 - 8 = 0$   |
|------------------------------|--------------------|--------------------|
| $x^2 = 25$                   | $x^2 = 5$          | $x^2 = 8$          |
| $\mathbf{x} = \pm \sqrt{25}$ | $x = \pm \sqrt{5}$ | $x = \pm \sqrt{8}$ |

| 1. $x^2 - 25 = 0$   | 2. $x^2 - 5 = 0$   | 3. $x^2 - 8 = 0$            |
|---------------------|--------------------|-----------------------------|
| $x^2 = 25$          | $x^2 = 5$          | $x^2 = 8$                   |
| $x = \pm \sqrt{25}$ | $x = \pm \sqrt{5}$ | $\mathbf{x} = \pm \sqrt{8}$ |
|                     |                    |                             |
|                     |                    |                             |

| 1. $x^2 - 25 = 0$   | $0 	 2. 	 x^2 - 5 = 0$      | 3. $x^2 - 8 = 0$            |
|---------------------|-----------------------------|-----------------------------|
| $x^2 = 25$          | $x^2 = 5$                   | $x^2 = 8$                   |
| $x = \pm \sqrt{25}$ | $\mathbf{x} = \pm \sqrt{5}$ | $\mathbf{x} = \pm \sqrt{8}$ |
| <b>x</b> =          |                             |                             |
|                     |                             |                             |

| 1. $x^2 - 25 = 0$   | 2. $x^2 - 5 = 0$            | 3. $x^2 - 8 = 0$            |
|---------------------|-----------------------------|-----------------------------|
| $x^2 = 25$          | $x^2 = 5$                   | $x^2 = 8$                   |
| $x = \pm \sqrt{25}$ | $\mathbf{x} = \pm \sqrt{5}$ | $\mathbf{x} = \pm \sqrt{8}$ |
| $\mathbf{x} = \pm$  |                             |                             |
|                     |                             |                             |

| 1. | $x^2 - 25 = 0$       | 2. $x^2 - 5 = 0$            | 3. $x^2 - 8 = 0$   |
|----|----------------------|-----------------------------|--------------------|
|    | $x^2 = 25$           | $x^2 = 5$                   | $x^2 = 8$          |
|    | $x = \pm \sqrt{25}$  | $\mathbf{x} = \pm \sqrt{5}$ | $x = \pm \sqrt{8}$ |
|    | $\mathbf{x} = \pm 5$ |                             |                    |
|    |                      |                             |                    |

| 1. $x^2 - 25 = 0$            | 2. $x^2 - 5 = 0$            | 3. $x^2 - 8 = 0$   |
|------------------------------|-----------------------------|--------------------|
| $x^2 = 25$                   | $x^2 = 5$                   | $x^2 = 8$          |
| $\mathbf{x} = \pm \sqrt{25}$ | $\mathbf{x} = \pm \sqrt{5}$ | $x = \pm \sqrt{8}$ |
| $\mathbf{x} = \pm 5$         |                             |                    |
|                              |                             |                    |

| 1. $x^2 - 25 = 0$            | 2. $x^2 - 5 = 0$            | 3. $x^2 - 8 = 0$            |
|------------------------------|-----------------------------|-----------------------------|
| $x^2 = 25$                   | $x^2 = 5$                   | $x^2 = 8$                   |
| $\mathbf{x} = \pm \sqrt{25}$ | $\mathbf{x} = \pm \sqrt{5}$ | $\mathbf{x} = \pm \sqrt{8}$ |
| $x = \pm 5$                  |                             |                             |

| 1. $x^2 - 25 = 0$    | 2. $x^2 - 5 = 0$   | 3. $x^2 - 8 = 0$            |
|----------------------|--------------------|-----------------------------|
| $x^2 = 25$           | $x^2 = 5$          | $x^2 = 8$                   |
| $x = \pm \sqrt{25}$  | $x = \pm \sqrt{5}$ | $\mathbf{x} = \pm \sqrt{8}$ |
| $\mathbf{x} = \pm 5$ |                    |                             |
|                      |                    |                             |

















4. 
$$25x^2 - 9 = 0$$
 5.  $3x^2 - 5 = 0$  6.  $7x^2 - 9 = 0$ 

4.  $25x^2 - 9 = 0$  5.  $3x^2 - 5 = 0$  6.  $7x^2 - 9 = 0$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
 5.  $3x^2 - 5 = 0$  6.  $7x^2 - 9 = 0$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 0$   
5.  $3x^2 - 5 = 0$   
6.  $7x^2 - 9 = 0$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
5.  $3x^2 - 5 = 0$   
6.  $7x^2 - 9 = 0$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = 0$   
5.  $3x^2 - 5 = 0$   
6.  $7x^2 - 9 = 0$   
 $x^2 = 0$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$   
5.  $3x^2 - 5 = 0$   
6.  $7x^2 - 9 = 0$ 

4. 
$$25x^2 - 9 = 0$$
 5.  $3x^2 - 5 = 0$  6.  $7x^2 - 9 = 0$   
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
6.  $7x^2 - 9 = 0$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 0$   
6.  $7x^2 - 9 = 0$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
6.  $7x^2 - 9 = 0$ 

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{9}{25}$ 
6.  $7x^2 - 9 = 0$
Algebra I Class Worksheet #3 Unit 13

Solve each of the following using the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$ 

**Step 1:** Solve for  $x^2$ .

4. 
$$25x^2 - 9 = 0$$
 5.  $3x^2 - 5 = 0$  6.  $7x^2 - 9 = 0$   
 $25x^2 = 9$   $3x^2 = 5$   
 $x^2 = \frac{9}{25}$   $x^2 = \frac{5}{3}$ 

**Step 1:** Solve for  $x^2$ .

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$ 

**Step 1:** Solve for x<sup>2</sup>.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 0$   
 $7x^2 = 0$ 

**Step 1:** Solve for  $x^2$ .

4. 
$$25x^2 - 9 = 0$$
 5.  $3x^2 - 5 = 0$  6.  $7x^2 - 9 = 0$   
 $25x^2 = 9$   $3x^2 = 5$   $7x^2 = 9$   
 $x^2 = \frac{9}{25}$   $x^2 = \frac{5}{3}$ 

**Step 1:** Solve for  $x^2$ .

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{5}{3}$ 

**Step 1:** Solve for x<sup>2</sup>.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{9}{7}$ 

**Step 1:** Solve for  $x^2$ .

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{9}{7}$ 

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{9}{7}$ 

**Step 2:** Apply the square root property.

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{9}{7}$ 



Step 2: Apply the square root property.The Square Root PropertyIf 
$$x^2 = k$$
 and  $k > 0$ , then  $x = \pm \sqrt{k}$ .





4.  $25x^2 - 9 = 0$   $25x^2 = 9$   $x^2 = \frac{9}{25}$   $x = \pm \sqrt{\frac{9}{25}}$ 5.  $3x^2 - 5 = 0$   $3x^2 = 5$   $x^2 = \frac{5}{3}$ 6.  $7x^2 - 9 = 0$   $7x^2 = 9$  $x^2 = \frac{9}{7}$ 

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$   
 $x = \pm \sqrt{\frac{9}{25}}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{5}{3}$   
 $x^2 = \frac{9}{7}$ 

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$   
 $x = \pm \sqrt{\frac{9}{25}}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{5}{3}$   
 $x = \pm$ 

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$   
 $x = \pm \sqrt{\frac{9}{25}}$ 
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$ 
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{5}{3}$   
 $x = \pm \sqrt{\frac{5}{3}}$ 

4.  $25x^2 - 9 = 0$   $25x^2 = 9$   $x^2 = \frac{9}{25}$   $x = \pm \sqrt{\frac{9}{25}}$ 5.  $3x^2 - 5 = 0$   $3x^2 = 5$   $x^2 = \frac{5}{3}$   $x = \pm \sqrt{\frac{5}{3}}$ 6.  $7x^2 - 9 = 0$   $7x^2 = 9$  $x^2 = \frac{9}{7}$ 

4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$   
 $x = \pm \sqrt{\frac{9}{25}}$   
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$   
 $x = \pm \sqrt{\frac{5}{3}}$   
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{9}{7}$   
 $x = \pm \sqrt{\frac{5}{3}}$ 



4. 
$$25x^2 - 9 = 0$$
  
 $25x^2 = 9$   
 $x^2 = \frac{9}{25}$   
 $x = \pm \sqrt{\frac{9}{25}}$   
5.  $3x^2 - 5 = 0$   
 $3x^2 = 5$   
 $x^2 = \frac{5}{3}$   
 $x = \pm \sqrt{\frac{5}{3}}$   
6.  $7x^2 - 9 = 0$   
 $7x^2 = 9$   
 $x^2 = \frac{9}{7}$   
 $x = \pm \sqrt{\frac{9}{7}}$ 

4.  $25x^2 - 9 = 0$   $25x^2 = 9$   $x^2 = \frac{9}{25}$   $x = \pm \sqrt{\frac{9}{25}}$ 5.  $3x^2 - 5 = 0$   $3x^2 = 5$   $x^2 = \frac{5}{3}$   $x = \pm \sqrt{\frac{5}{3}}$ 6.  $7x^2 - 9 = 0$   $7x^2 = 9$   $x^2 = \frac{9}{7}$   $x = \pm \sqrt{\frac{9}{7}}$  $x = \pm \sqrt{\frac{9}{7}}$ 

4.  $25x^2 - 9 = 0$   $25x^2 = 9$   $x^2 = \frac{9}{25}$   $x = \pm \sqrt{\frac{9}{25}}$ 5.  $3x^2 - 5 = 0$   $3x^2 = 5$   $x^2 = \frac{5}{3}$   $x = \pm \sqrt{\frac{9}{7}}$   $x = \pm \sqrt{\frac{9}{7}}$   $x = \pm \sqrt{\frac{9}{7}}$ 6.  $7x^2 - 9 = 0$   $7x^2 = 9$   $x^2 = \frac{9}{7}$  $x = \pm \sqrt{\frac{9}{7}}$ 



Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in standard radical form.

| 4. $25x^2 - 9 =$              | $0 		 5. 		 3x^2 - 5 = 0$                        | 6. $7x^2 - 9 = 0$                     |
|-------------------------------|--|---------------------------------------|
| $25x^2 = 9$                   | $3x^2 = 5$                                       | $7x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{9}{25}$ | $\mathbf{x}^2 = \frac{5}{3}$                     | $\mathbf{x}^2 = \frac{9}{7}$          |
| $x = \pm \sqrt{\frac{2}{2}}$  | $\frac{9}{25} \qquad x = \pm \sqrt{\frac{5}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.

| 4. | $25x^2 - 9 = 0$                        | 5. $3x^2 - 5 = 0$                     | 6. $7x^2 - 9 = 0$                     |
|----|--|---------------------------------------|---------------------------------------|
|    | $25x^2 = 9$                            | $3x^2 = 5$                            | $7x^2 = 9$                            |
|    | $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$          | $\mathbf{x}^2 = \frac{9}{7}$          |
|    | $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
|    | $\mathbf{x} = \pm$                     |                                       |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.

| 4. | $25x^2 - 9 = 0$                        | 5. $3x^2 - 5 = 0$                     | 6. $7x^2 - 9 = 0$                     |
|----|--|---------------------------------------|---------------------------------------|
|    | $25x^2 = 9$                            | $3x^2 = 5$                            | $7x^2 = 9$                            |
|    | $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$          | $\mathbf{x}^2 = \frac{9}{7}$          |
|    | $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
|    | $x = \pm \frac{3}{5}$                  |                                       |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in standard radical form.

| 4. | $25x^2 - 9 = 0$                        | 5. $3x^2 - 5 = 0$                     | 6. $7x^2 - 9 = 0$                     |
|----|--|---------------------------------------|---------------------------------------|
|    | $25x^2 = 9$                            | $3x^2 = 5$                            | $7x^2 = 9$                            |
|    | $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$          | $\mathbf{x}^2 = \frac{9}{7}$          |
|    | $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
|    | $\mathbf{x} = \pm \frac{3}{5}$         |                                       |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in standard radical form.

4.  $25x^2 - 9 = 0$   $25x^2 = 9$   $x^2 = \frac{9}{25}$   $x = \pm \sqrt{\frac{9}{25}}$   $x = \pm \frac{3}{5}$ 5.  $3x^2 - 5 = 0$   $3x^2 = 5$   $x^2 = 5$   $x^2 = \frac{5}{3}$   $x = \pm \sqrt{\frac{5}{3}}$ 6.  $7x^2 - 9 = 0$   $7x^2 = 9$   $x^2 = \frac{9}{7}$   $x = \pm \sqrt{\frac{9}{7}}$  $x = \pm \sqrt{\frac{9}{7}}$ 

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the

| 4. $25x^2 - 9 = 0$                     | 5. $3x^2 - 5 = 0$                     | 6. $7x^2 - 9 = 0$                     |
|--|---------------------------------------|---------------------------------------|
| $25x^2 = 9$                            | $3x^2 = 5$                            | $7x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$          | $\mathbf{x}^2 = \frac{9}{7}$          |
| $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
| $\mathbf{x} = \pm \frac{3}{5}$         |                                       |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 4. $25x^2 - 9 = 0$                     | 5. $3x^2 - 5 = 0$                     | 6. $7x^2 - 9 = 0$                     |
|--|---------------------------------------|---------------------------------------|
| $25x^2 = 9$                            | $3x^2 = 5$                            | $7x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$          | $\mathbf{x}^2 = \frac{9}{7}$          |
| $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
| $\mathbf{x} = \pm \frac{3}{5}$         | $\mathbf{x} = \pm$                    |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 4. $25x^2 - 9 = 0$                     | 5. $3x^2 - 5 = 0$                      | 6. $7x^2 - 9 = 0$                     |
|--|--|---------------------------------------|
| $25x^2 = 9$                            | $3x^2 = 5$                             | $7x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$           | $\mathbf{x}^2 = \frac{9}{7}$          |
| $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$  | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
| $\mathbf{x} = \pm \frac{3}{5}$         | $\mathbf{x} = \pm \frac{\sqrt{15}}{3}$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 4. $25x^2 - 9 = 0$                     | 5. $3x^2 - 5 = 0$                      | 6. $7x^2 - 9 = 0$                     |
|--|--|---------------------------------------|
| $25x^2 = 9$                            | $3x^2 = 5$                             | $7x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$           | $\mathbf{x}^2 = \frac{9}{7}$          |
| $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$  | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
| $\mathbf{x} = \pm \frac{3}{5}$         | $\mathbf{x} = \pm \frac{\sqrt{15}}{3}$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 4. | $25x^2 - 9 = 0$                        | 5. $3x^2 - 5 = 0$                      | 6. $7x^2 - 9 = 0$                     |
|----|--|--|---------------------------------------|
|    | $25x^2 = 9$                            | $3x^2 = 5$                             | $7x^2 = 9$                            |
|    | $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$           | $\mathbf{x}^2 = \frac{9}{7}$          |
|    | $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$  | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
|    | $\mathbf{x} = \pm \frac{3}{5}$         | $\mathbf{x} = \pm \frac{\sqrt{15}}{3}$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 4. | $25x^2 - 9 = 0$                        | 5. $3x^2 - 5 = 0$                      | 6. $7x^2 - 9 = 0$                     |
|----|--|--|---------------------------------------|
|    | $25x^2 = 9$                            | $3x^2 = 5$                             | $7x^2 = 9$                            |
|    | $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$           | $\mathbf{x}^2 = \frac{9}{7}$          |
|    | $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$  | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
|    | $\mathbf{x} = \pm \frac{3}{5}$         | $\mathbf{x} = \pm \frac{\sqrt{15}}{3}$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 4. | $25x^2 - 9 = 0$                        | 5. $3x^2 - 5 = 0$                      | 6. $7x^2 - 9 = 0$                     |
|----|--|--|---------------------------------------|
|    | $25x^2 = 9$                            | $3x^2 = 5$                             | $7x^2 = 9$                            |
|    | $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$           | $\mathbf{x}^2 = \frac{9}{7}$          |
|    | $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$  | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$ |
|    | $\mathbf{x} = \pm \frac{3}{5}$         | $\mathbf{x} = \pm \frac{\sqrt{15}}{3}$ | $\mathbf{x} = \pm$                    |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.
| 4. $25x^2$            | -9=0 5.                  | $3x^2-5=0$                             | <b>6.</b> | $7x^2-9=0$                             |
|-----------------------|--------------------------|--|-----------|--|
| 25x                   | $2^{2} = 9$              | $3x^2 = 5$                             |           | $7x^2 = 9$                             |
| <b>X</b> <sup>2</sup> | $=\frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$           |           | $\mathbf{x}^2 = \frac{9}{7}$           |
| <b>x</b> =            | $\pm\sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$  |           | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$  |
| X                     | $=\pm\frac{3}{5}$        | $\mathbf{x} = \pm \frac{\sqrt{15}}{3}$ |           | $\mathbf{x} = \pm \frac{3\sqrt{7}}{7}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.

| $4.  25x^2 - 9 = 0$                    | 5. $3x^2 - 5 = 0$                      | 6. $7x^2 - 9 = 0$                      |
|--|--|--|
| $25x^2 = 9$                            | $3x^2 = 5$                             | $7x^2 = 9$                             |
| $\mathbf{x}^2 = \frac{9}{25}$          | $\mathbf{x}^2 = \frac{5}{3}$           | $\mathbf{x}^2 = \frac{9}{7}$           |
| $\mathbf{x} = \pm \sqrt{\frac{9}{25}}$ | $\mathbf{x} = \pm \sqrt{\frac{5}{3}}$  | $\mathbf{x} = \pm \sqrt{\frac{9}{7}}$  |
| $\mathbf{x} = \pm \frac{3}{5}$         | $\mathbf{x} = \pm \frac{\sqrt{15}}{3}$ | $\mathbf{x} = \pm \frac{3\sqrt{7}}{7}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.



Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.

4.  $25x^2 - 9 = 0$   $25x^2 = 9$   $x^2 = \frac{9}{25}$   $x = \pm \sqrt{\frac{9}{25}}$   $x = \pm \frac{3}{5}$ 5.  $3x^2 - 5 = 0$   $3x^2 = 5$   $x^2 = \frac{5}{3}$   $x = \pm \sqrt{\frac{5}{3}}$   $x = \pm \sqrt{\frac{9}{7}}$   $x = \pm \frac{\sqrt{15}}{3}$  $x = \pm \frac{3\sqrt{7}}{7}$ 

7. 
$$5x^2 - 1 = 0$$
 8.  $5x^2 - 4 = 0$  9.  $2x^2 - 6 = 0$ 

7.  $5x^2 - 1 = 0$  8.  $5x^2 - 4 = 0$  9.  $2x^2 - 6 = 0$ 

Solve each of the following using the square root property.

7. 
$$5x^2 - 1 = 0$$
 8.  $5x^2 - 4 = 0$  9.  $2x^2 - 6 = 0$ 

Solve each of the following using the square root property.

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 =$ 
8.  $5x^2 - 4 = 0$ 
9.  $2x^2 - 6 = 0$ 

### **Step 1:** Solve for x<sup>2</sup>.

Solve each of the following using the square root property.

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$ 
8.  $5x^2 - 4 = 0$ 
9.  $2x^2 - 6 = 0$ 

### **Step 1:** Solve for x<sup>2</sup>.

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = 0$ 
8.  $5x^2 - 4 = 0$ 
9.  $2x^2 - 6 = 0$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$ 
8.  $5x^2 - 4 = 0$ 
9.  $2x^2 - 6 = 0$ 

### **Step 1:** Solve for x<sup>2</sup>.

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 - 1 = 0$   
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
9.  $2x^2 - 6 = 0$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
9.  $2x^2 - 6 = 0$ 

Solve each of the following using the square root property.

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
9.  $2x^2 - 6 = 0$ 

7.  $5x^2 - 1 = 0$   $5x^2 = 1$   $x^2 = \frac{1}{5}$ 8.  $5x^2 - 4 = 0$   $5x^2 - 6 = 0$ 9.  $2x^2 - 6 = 0$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
9.  $2x^2 - 6 = 0$   
 $x^2 = 4$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
9.  $2x^2 - 6 = 0$   
 $x^2 = \frac{4}{5}$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $x^2 = \frac{4}{5}$ 

**Step 1:** Solve for x<sup>2</sup>.

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
9.  $2x^2 - 6 = 0$   
 $x^2 = \frac{4}{5}$ 

**Step 1:** Solve for x<sup>2</sup>.

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$ 
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 0$   
 $x^2 = \frac{4}{5}$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x^2 = \frac{4}{5}$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x^2 = \frac{4}{5}$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x^2 = 3$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x^2 = 3$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x^2 = 3$ 

**Step 2:** Apply the square root property.

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x^2 = 3$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$ 
8.  $5x^2 - 4 = 0$   
 $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x^2 = 3$ 

| 7. $5x^2 - 1 = 0$            | 8. $5x^2 - 4 = 0$            | 9. $2x^2 - 6 = 0$ |
|------------------------------|------------------------------|-------------------|
| $5x^2 = 1$                   | $5x^2 = 4$                   | $2x^2 = 6$        |
| $\mathbf{X}^2 = \frac{1}{5}$ | $\mathbf{x}^2 = \frac{4}{5}$ | $x^2 = 3$         |
| $\mathbf{x} = \pm$           |                              |                   |

7. 
$$5x^{2} - 1 = 0$$
  
 $5x^{2} = 1$   
 $x^{2} = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$ 
8.  $5x^{2} - 4 = 0$   
 $5x^{2} = 4$   
 $x^{2} = \frac{4}{5}$ 
9.  $2x^{2} - 6 = 0$   
 $2x^{2} = 6$   
 $x^{2} = \frac{4}{5}$   
 $x^{2} = \frac{3}{5}$ 

7. 
$$5x^{2} - 1 = 0$$
  
 $5x^{2} = 1$   
 $x^{2} = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^{2} - 4 = 0$   
 $5x^{2} - 6 = 0$   
 $5x^{2} = 4$   
 $x^{2} = \frac{4}{5}$   
 $x^{2} = \frac{4}{5}$   
 $x^{2} = 3$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x^2 = \frac{3}{5}$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x = \pm$ 

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x = \pm \sqrt{\frac{4}{5}}$ 

7.  $5x^2 - 1 = 0$   $5x^2 = 1$   $x^2 = \frac{1}{5}$   $x = \pm \sqrt{\frac{1}{5}}$ 8.  $5x^2 - 4 = 0$   $5x^2 - 6 = 0$   $5x^2 = 4$   $x^2 = \frac{4}{5}$   $x = \pm \sqrt{\frac{4}{5}}$ 9.  $2x^2 - 6 = 0$   $2x^2 = 6$  $x^2 = 3$ 

7. 
$$5x^{2} - 1 = 0$$
  
 $5x^{2} = 1$   
 $x^{2} = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^{2} - 4 = 0$   
 $5x^{2} - 6 = 0$   
 $2x^{2} - 6 = 0$   
 $2x^{2} = 6$   
 $x^{2} = \frac{4}{5}$   
 $x = \pm \sqrt{\frac{4}{5}}$
7. 
$$5x^{2} - 1 = 0$$
  
 $5x^{2} = 1$   
 $x^{2} = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^{2} - 4 = 0$   
 $5x^{2} - 6 = 0$   
 $2x^{2} - 6 = 0$   
 $2x^{2} = 6$   
 $x^{2} = \frac{4}{5}$   
 $x = \pm \sqrt{\frac{4}{5}}$   
8.  $5x^{2} - 4 = 0$   
 $2x^{2} = 6$   
 $x^{2} = 3$   
 $x = \pm \sqrt{\frac{1}{5}}$   
 $x = \pm \sqrt{\frac{4}{5}}$   
8.  $5x^{2} - 4 = 0$   
 $2x^{2} = 6$   
 $x^{2} = 3$   
 $x = \pm \sqrt{\frac{4}{5}}$ 

Step 2: Apply the square root property.The Square Root PropertyIf  $x^2 = k$  and k > 0, then  $x = \pm \sqrt{k}$ .

7. 
$$5x^{2} - 1 = 0$$
  
 $5x^{2} = 1$   
 $x^{2} = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^{2} - 4 = 0$   
 $5x^{2} - 6 = 0$   
 $2x^{2} - 6 = 0$   
 $2x^{2} = 6$   
 $x^{2} = \frac{4}{5}$   
 $x = \pm \sqrt{\frac{4}{5}}$   
8.  $5x^{2} - 4 = 0$   
 $2x^{2} = 6$   
 $x^{2} = 3$   
 $x = \pm \sqrt{\frac{3}{5}}$ 

Step 2: Apply the square root property.The Square Root PropertyIf  $x^2 = k$  and k > 0, then  $x = \pm \sqrt{k}$ .

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $5x^2 = 4$   
 $x^2 = \frac{4}{5}$   
 $x = \pm \sqrt{\frac{4}{5}}$   
 $x = \pm \sqrt{\frac{3}{5}}$ 

Step 2: Apply the square root property.The Square Root PropertyIf  $x^2 = k$  and k > 0, then  $x = \pm \sqrt{k}$ .

7. 
$$5x^2 - 1 = 0$$
  
 $5x^2 = 1$   
 $x^2 = \frac{1}{5}$   
 $x = \pm \sqrt{\frac{1}{5}}$   
8.  $5x^2 - 4 = 0$   
 $5x^2 - 6 = 0$   
 $2x^2 - 6 = 0$   
 $2x^2 = 6$   
 $x^2 = \frac{4}{5}$   
 $x = \pm \sqrt{\frac{4}{5}}$   
 $x = \pm \sqrt{\frac{3}{5}}$ 

| 7. | $5x^2-1=0$                            | 8. $5x^2 - 4 = 0$                     | 9. | $2x^2-6=0$                  |
|----|---------------------------------------|---------------------------------------|----|-----------------------------|
|    | $5x^2 = 1$                            | $5x^2 = 4$                            |    | $2x^2 = 6$                  |
|    | $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$          |    | $x^2 = 3$                   |
|    | $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$ |    | $\mathbf{x} = \pm \sqrt{3}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in standard radical form.

| 7. $5x^2 - 1 = 0$                     | 8. $5x^2 - 4 = 0$                     | 9. $2x^2 - 6 = 0$           |
|---------------------------------------|---------------------------------------|-----------------------------|
| $5x^2 = 1$                            | $5x^2 = 4$                            | $2x^2 = 6$                  |
| $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$          | $x^2 = 3$                   |
| $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$ | $\mathbf{x} = \pm \sqrt{3}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.

| 7. $5x^2 - 1 = 0$                     | 8. $5x^2 - 4 = 0$                     | 9. $2x^2 - 6 = 0$           |
|---------------------------------------|---------------------------------------|-----------------------------|
| $5x^2 = 1$                            | $5x^2 = 4$                            | $2x^2 = 6$                  |
| $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$          | $x^2 = 3$                   |
| $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$ | $\mathbf{x} = \pm \sqrt{3}$ |
| $\mathbf{x} = \pm$                    |                                       |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.

| 7. $5x^2 - 1 = 0$                     | 8. $5x^2 - 4 = 0$                     | 9. $2x^2 - 6 = 0$           |
|---------------------------------------|---------------------------------------|-----------------------------|
| $5x^2 = 1$                            | $5x^2 = 4$                            | $2x^2 = 6$                  |
| $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$          | $x^2 = 3$                   |
| $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$ | $\mathbf{x} = \pm \sqrt{3}$ |
| $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ |                                       |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in standard radical form.

| 7. $5x^2 - 1 = 0$                     | 8. $5x^2 - 4 = 0$                     | 9. $2x^2 - 6 = 0$           |
|---------------------------------------|---------------------------------------|-----------------------------|
| $5x^2 = 1$                            | $5x^2 = 4$                            | $2x^2 = 6$                  |
| $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$          | $x^2 = 3$                   |
| $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$ | $\mathbf{x} = \pm \sqrt{3}$ |
| $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ |                                       |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in standard radical form.

| 7. $5x^2 - 1 = 0$                     | 8. $5x^2 - 4 = 0$                     | 9. $2x^2 - 6 = 0$           |
|---------------------------------------|---------------------------------------|-----------------------------|
| $5x^2 = 1$                            | $5x^2 = 4$                            | $2x^2 = 6$                  |
| $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$          | $x^2 = 3$                   |
| $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$ | $\mathbf{x} = \pm \sqrt{3}$ |
| $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ |                                       |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 7. $5x^2 - 1 = 0$                     | 8. $5x^2 - 4 = 0$                     | 9. $2x^2 - 6 = 0$           |
|---------------------------------------|---------------------------------------|-----------------------------|
| $5x^2 = 1$                            | $5x^2 = 4$                            | $2x^2 = 6$                  |
| $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$          | $x^2 = 3$                   |
| $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$ | $\mathbf{x} = \pm \sqrt{3}$ |
| $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ | $\mathbf{x} = \pm$                    |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 7. $5x^2 - 1 = 0$                     | 8. $5x^2 - 4 = 0$                      | 9. $2x^2 - 6 = 0$           |
|---------------------------------------|--|-----------------------------|
| $5x^2 = 1$                            | $5x^2 = 4$                             | $2x^2 = 6$                  |
| $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$           | $x^2 = 3$                   |
| $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$  | $\mathbf{x} = \pm \sqrt{3}$ |
| $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ | $\mathbf{x} = \pm \frac{2\sqrt{5}}{5}$ |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 7. $5x^2 - 1 = 0$                     | 8. $5x^2 - 4 = 0$                      | 9. $2x^2 - 6 = 0$           |
|---------------------------------------|--|-----------------------------|
| $5x^2 = 1$                            | $5x^2 = 4$                             | $2x^2 = 6$                  |
| $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$           | $x^2 = 3$                   |
| $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$  | $\mathbf{x} = \pm \sqrt{3}$ |
| $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ | $\mathbf{x} = \pm \frac{2\sqrt{5}}{5}$ |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 7. | $5x^2 - 1 = 0$                        | 8. $5x^2 - 4 = 0$                      | 9. $2x^2 - 6 = 0$           |
|----|---------------------------------------|--|-----------------------------|
|    | $5x^2 = 1$                            | $5x^2 = 4$                             | $2x^2 = 6$                  |
|    | $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$           | $x^2 = 3$                   |
|    | $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$  | $\mathbf{x} = \pm \sqrt{3}$ |
|    | $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ | $\mathbf{x} = \pm \frac{2\sqrt{5}}{5}$ |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 7. | $5x^2 - 1 = 0$                        | 8. $5x^2 - 4 = 0$                      | 9. $2x^2 - 6 = 0$           |
|----|---------------------------------------|--|-----------------------------|
|    | $5x^2 = 1$                            | $5x^2 = 4$                             | $2x^2 = 6$                  |
|    | $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$           | $x^2 = 3$                   |
|    | $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{5}}$  | $\mathbf{x} = \pm \sqrt{3}$ |
|    | $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ | $\mathbf{x} = \pm \frac{2\sqrt{5}}{5}$ |                             |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 7. | $5x^2 - 1 = 0$                        | 8. $5x^2 - 4 = 0$                      | 9. $2x^2 - 6 = 0$  |
|----|---------------------------------------|--|--------------------|
|    | $5x^2 = 1$                            | $5x^2 = 4$                             | $2x^2 = 6$         |
|    | $\mathbf{x}^2 = \frac{1}{5}$          | $\mathbf{x}^2 = \frac{4}{5}$           | $x^2 = 3$          |
|    | $\mathbf{x} = \pm \sqrt{\frac{1}{5}}$ | $x = \pm \sqrt{\frac{4}{5}}$           | $x = \pm \sqrt{3}$ |
|    | $\mathbf{x} = \pm \frac{\sqrt{5}}{5}$ | $\mathbf{x} = \pm \frac{2\sqrt{5}}{5}$ |                    |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.



Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

7.  $5x^2 - 1 = 0$   $5x^2 = 1$   $x^2 = \frac{1}{5}$   $x = \pm \sqrt{\frac{1}{5}}$   $x = \pm \frac{\sqrt{5}}{5}$ 8.  $5x^2 - 4 = 0$   $5x^2 - 6 = 0$   $2x^2 - 6 = 0$   $2x^2 = 6$   $x^2 = \frac{4}{5}$   $x = \pm \sqrt{\frac{4}{5}}$   $x = \pm \sqrt{\frac{3}{5}}$  $x = \pm \frac{2\sqrt{5}}{5}$ 

10.  $8x^2 - 3 = 0$  11.  $3x^2 - 12 = 0$  12.  $6x^2 - 9 = 0$ 

10.  $8x^2 - 3 = 0$  11.  $3x^2 - 12 = 0$  12.  $6x^2 - 9 = 0$ 

Solve each of the following using the square root property.

10.  $8x^2 - 3 = 0$  11.  $3x^2 - 12 = 0$  12.  $6x^2 - 9 = 0$ 

Solve each of the following using the square root property.

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 11.$   $3x^2 - 12 = 0$   
12.  $6x^2 - 9 = 0$   
 $8x^2 = 0$ 

# **Step 1:** Solve for x<sup>2</sup>.

Solve each of the following using the square root property.

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
11.  $3x^2 - 12 = 0$   
12.  $6x^2 - 9 = 0$ 

# **Step 1:** Solve for x<sup>2</sup>.

Solve each of the following using the square root property.

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = 3$   
11.  $3x^2 - 12 = 0$   
12.  $6x^2 - 9 = 0$   
 $x^2 = 0$ 

Solve each of the following using the square root property.

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$   
11.  $3x^2 - 12 = 0$   
12.  $6x^2 - 9 = 0$ 

# **Step 1:** Solve for x<sup>2</sup>.

10.  $8x^2 - 3 = 0$  11.  $3x^2 - 12 = 0$  12.  $6x^2 - 9 = 0$   $8x^2 = 3$  $x^2 = \frac{3}{8}$ 

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$ 
11.  $3x^2 - 12 = 0$   
12.  $6x^2 - 9 = 0$ 

Solve each of the following using the square root property.

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$ 
11.  $3x^2 - 12 = 0$   
 $3x^2 = 0$   
12.  $6x^2 - 9 = 0$   
 $3x^2 = 0$ 

Solve each of the following using the square root property.

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$   
11.  $3x^2 - 12 = 0$   
 $3x^2 = 12$   
12.  $6x^2 - 9 = 0$   
 $3x^2 = 12$ 

Solve each of the following using the square root property.

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$   
11.  $3x^2 - 12 = 0$   
 $3x^2 = 12$   
 $x^2 = \frac{3}{8}$   
12.  $6x^2 - 9 = 0$   
 $x^2 = 0$ 

10.  $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$   $x^2 = 4$ 12.  $6x^2 - 9 = 0$  $12x^2 = 0$ 

10.  $8x^2 - 3 = 0$   $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$  $x^2 = 4$ 

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$   
11.  $3x^2 - 12 = 0$   
 $3x^2 = 12$   
 $x^2 = 4$   
12.  $6x^2 - 9 = 0$   
 $12. 6x^2 - 9 = 0$ 

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$   
11.  $3x^2 - 12 = 0$   
 $3x^2 = 12$   
 $x^2 = 4$   
12.  $6x^2 - 9 = 0$   
 $6x^2 = 0$   
 $x^2 = 4$ 

10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$   
11.  $3x^2 - 12 = 0$   
 $3x^2 = 12$   
 $x^2 = 4$   
12.  $6x^2 - 9 = 0$   
 $6x^2 = 9$ 

10.
$$8x^2 - 3 = 0$$
11. $3x^2 - 12 = 0$ 12. $6x^2 - 9 = 0$  $8x^2 = 3$  $3x^2 = 12$  $6x^2 = 9$  $x^2 = \frac{3}{8}$  $x^2 = 4$  $x^2 = 4$
10. 
$$8x^2 - 3 = 0$$
  
 $8x^2 = 3$   
 $x^2 = \frac{3}{8}$   
11.  $3x^2 - 12 = 0$   
 $3x^2 = 12$   
 $x^2 = 4$   
12.  $6x^2 - 9 = 0$   
 $6x^2 = 9$   
 $x^2 = \frac{3}{2}$ 

#### **Step 1:** Solve for $x^2$ .

10.  $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$   $x^2 = \frac{3}{8}$ 12.  $6x^2 - 9 = 0$   $6x^2 = 9$  $x^2 = \frac{3}{2}$ 

**Step 1:** Solve for  $x^2$ .

10.  $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$   $x^2 = \frac{3}{8}$ 12.  $6x^2 - 9 = 0$   $6x^2 = 9$  $x^2 = \frac{3}{2}$ 

10.  $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$   $x^2 = \frac{3}{8}$ 12.  $6x^2 - 9 = 0$   $6x^2 = 9$  $x^2 = \frac{3}{2}$ 

**Step 2:** Apply the square root property.

10.  $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$   $x^2 = \frac{3}{8}$ 12.  $6x^2 - 9 = 0$   $6x^2 = 9$  $x^2 = \frac{3}{2}$ 

| 10. | $8x^2 - 3 = 0$               | 11. | $3x^2 - 12 = 0$ | 12. | $6x^2 - 9 = 0$               |
|-----|------------------------------|-----|-----------------|-----|------------------------------|
|     | $8x^2 = 3$                   |     | $3x^2 = 12$     |     | $6x^2 = 9$                   |
|     | $\mathbf{x}^2 = \frac{3}{8}$ |     | $x^2 = 4$       |     | $\mathbf{x}^2 = \frac{3}{2}$ |
|     |                              |     |                 |     |                              |

| 10. | $8x^2 - 3 = 0$               | 11. | $3x^2 - 12 = 0$ | 12. | $6x^2 - 9 = 0$               |
|-----|------------------------------|-----|-----------------|-----|------------------------------|
|     | $8x^2 = 3$                   |     | $3x^2 = 12$     |     | $6x^2 = 9$                   |
|     | $\mathbf{x}^2 = \frac{3}{8}$ |     | $x^2 = 4$       |     | $\mathbf{x}^2 = \frac{3}{2}$ |
|     | $\mathbf{x} = \pm$           |     |                 |     |                              |
|     |                              |     |                 |     |                              |

| 10. | $8x^2 - 3 = 0$                        | 11. | $3x^2 - 12 = 0$ | 12. | $6x^2 - 9 = 0$               |
|-----|---------------------------------------|-----|-----------------|-----|------------------------------|
|     | $8x^2 = 3$                            |     | $3x^2 = 12$     |     | $6x^2 = 9$                   |
|     | $\mathbf{x}^2 = \frac{3}{8}$          |     | $x^2 = 4$       |     | $\mathbf{x}^2 = \frac{3}{2}$ |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ |     |                 |     |                              |

10.  $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$   $x = \pm \sqrt{\frac{3}{8}}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$   $x^2 = 4$   $x^2 = \frac{3}{2}$   $x^2 = 4$  $x^2 = \frac{3}{2}$ 

| 10. $8x^2 - 3$              | = 0 11.              | $3x^2 - 12 = 0$ | 12. | $6x^2 - 9 = 0$               |
|-----------------------------|----------------------|-----------------|-----|------------------------------|
| $8x^2 = 3$                  | 3                    | $3x^2 = 12$     |     | $6x^2 = 9$                   |
| $x^2 = \frac{3}{8}$         | <u>3</u>             | $x^2 = 4$       |     | $\mathbf{x}^2 = \frac{3}{2}$ |
| $\mathbf{x} = \pm \sqrt{2}$ | $\sqrt{\frac{3}{8}}$ |                 |     |                              |

| 10. $8x^2 - 3 = 0$                    | 11. $3x^2 - 12 = 0$         | 12. | $6x^2 - 9 = 0$               |
|---------------------------------------|-----------------------------|-----|------------------------------|
| $8x^2 = 3$                            | $3x^2 = 12$                 |     | $6x^2 = 9$                   |
| $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$                   |     | $\mathbf{x}^2 = \frac{3}{2}$ |
| $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $\mathbf{x} = \mathbf{\pm}$ |     |                              |

 10.  $8x^2 - 3 = 0$  11.  $3x^2 - 12 = 0$  12.  $6x^2 - 9 = 0$ 
 $8x^2 = 3$   $3x^2 = 12$   $6x^2 = 9$ 
 $x^2 = \frac{3}{8}$   $x^2 = 4$   $x^2 = \frac{3}{2}$ 
 $x = \pm \sqrt{\frac{3}{8}}$   $x = \pm \sqrt{4}$ 

10.  $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$   $x = \pm \sqrt{\frac{3}{8}}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$   $x^2 = 4$   $x = \pm \sqrt{\frac{3}{8}}$   $x = \pm \sqrt{\frac{3}{8}}$ 12.  $6x^2 - 9 = 0$   $6x^2 = 9$   $x^2 = \frac{3}{2}$  $x = \pm \sqrt{\frac{3}{8}}$ 

| 10. $8x^2$ | 2 - 3 = 0                | 11. | $3x^2 - 12 = 0$             | 12. | $6x^2 - 9 = 0$               |
|------------|--------------------------|-----|-----------------------------|-----|------------------------------|
| <b>8</b> x | $2^{2}=3$                |     | $3x^2 = 12$                 |     | $6x^2 = 9$                   |
| X          | $^2=\frac{3}{8}$         |     | $x^2 = 4$                   |     | $\mathbf{x}^2 = \frac{3}{2}$ |
| <b>x</b> = | $\pm \sqrt{\frac{3}{8}}$ |     | $\mathbf{x} = \pm \sqrt{4}$ |     |                              |

| 10. $8x^2 - 3 = 0$                    | 11. $3x^2 - 12 = 0$         | 12. $6x^2 - 9 = 0$           |
|---------------------------------------|-----------------------------|------------------------------|
| $8x^2 = 3$                            | $3x^2 = 12$                 | $6x^2 = 9$                   |
| $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$                   | $\mathbf{x}^2 = \frac{3}{2}$ |
| $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $\mathbf{x} = \pm \sqrt{4}$ | $\mathbf{x} = \pm$           |

| 10. $8x^2 - 3 = 0$           | 11. $3x^2 - 12 = 0$         | 12. $6x^2 - 9 = 0$                    |
|------------------------------|-----------------------------|---------------------------------------|
| $8x^2 = 3$                   | $3x^2 = 12$                 | $6x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{3}{8}$ | $x^2 = 4$                   | $\mathbf{x}^2 = \frac{3}{2}$          |
| $x = \pm \sqrt{\frac{3}{8}}$ | $\mathbf{x} = \pm \sqrt{4}$ | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |

10.  $8x^2 - 3 = 0$   $8x^2 = 3$   $x^2 = \frac{3}{8}$   $x = \pm \sqrt{\frac{3}{8}}$ 11.  $3x^2 - 12 = 0$   $3x^2 = 12$   $x^2 = 4$   $x = \pm \sqrt{\frac{3}{2}}$   $x = \pm \sqrt{\frac{3}{2}}$  $x = \pm \sqrt{\frac{3}{2}}$ 

 10.  $8x^2 - 3 = 0$  11.  $3x^2 - 12 = 0$  12.  $6x^2 - 9 = 0$ 
 $8x^2 = 3$   $3x^2 = 12$   $6x^2 = 9$ 
 $x^2 = \frac{3}{8}$   $x^2 = 4$   $x^2 = \frac{3}{2}$ 
 $x = \pm \sqrt{\frac{3}{8}}$   $x = \pm \sqrt{\frac{3}{2}}$ 

| 10. | $8x^2 - 3 = 0$               | 11. | $3x^2 - 12 = 0$    | 12. | $6x^2 - 9 = 0$                        |
|-----|------------------------------|-----|--------------------|-----|---------------------------------------|
|     | $8x^2 = 3$                   |     | $3x^2 = 12$        |     | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$ |     | $x^2 = 4$          |     | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $x = \pm \sqrt{\frac{3}{8}}$ |     | $x = \pm \sqrt{4}$ |     | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |

| 10. | $8x^2 - 3 = 0$                        | 11. | $3x^2 - 12 = 0$    | 12. | $6x^2 - 9 = 0$                        |
|-----|---------------------------------------|-----|--------------------|-----|---------------------------------------|
|     | $8x^2 = 3$                            |     | $3x^2 = 12$        |     | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          |     | $x^2 = 4$          |     | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ |     | $x = \pm \sqrt{4}$ |     | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |

| 10. | $8x^2 - 3 = 0$                        | 11. | $3x^2 - 12 = 0$             | 12. | $6x^2 - 9 = 0$                        |
|-----|---------------------------------------|-----|-----------------------------|-----|---------------------------------------|
|     | $8x^2 = 3$                            |     | $3x^2 = 12$                 |     | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          |     | $x^2 = 4$                   |     | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ |     | $\mathbf{x} = \pm \sqrt{4}$ |     | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm$                    |     |                             |     |                                       |

| 10. | $8x^2 - 3 = 0$                        | 11. $3x^2 - 12 = 0$         | 12. $6x^2 - 9 = 0$                    |
|-----|---------------------------------------|-----------------------------|---------------------------------------|
|     | $8x^2 = 3$                            | $3x^2 = 12$                 | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$                   | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{X} = \pm \sqrt{\frac{3}{8}}$ | $\mathbf{x} = \pm \sqrt{4}$ | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $x = \pm \frac{\sqrt{6}}{4}$          |                             |                                       |

| 10. | $8x^2 - 3 = 0$                        | 11. $3x^2 - 12 = 0$         | 12. | $6x^2 - 9 = 0$                        |
|-----|---------------------------------------|-----------------------------|-----|---------------------------------------|
|     | $8x^2 = 3$                            | $3x^2 = 12$                 |     | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$                   |     | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $\mathbf{x} = \pm \sqrt{4}$ |     | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ |                             |     |                                       |

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| 10. | $8x^2 - 3 = 0$                        | 11. $3x^2 - 12 = 0$         | 12. | $6x^2 - 9 = 0$               |
|-----|---------------------------------------|-----------------------------|-----|------------------------------|
|     | $8x^2 = 3$                            | $3x^2 = 12$                 |     | $6x^2 = 9$                   |
|     | $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$                   |     | $\mathbf{x}^2 = \frac{3}{2}$ |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $\mathbf{x} = \pm \sqrt{4}$ |     | $x = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ |                             |     |                              |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the

solutions in standard radical form.

| 10. $8x^2 - 3 = 0$                    | 11. $3x^2 - 12 = 0$ | 12. $6x^2 - 9 = 0$                    |
|---------------------------------------|---------------------|---------------------------------------|
| $8x^2 = 3$                            | $3x^2 = 12$         | $6x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{3}{8}$          | $\mathbf{x}^2 = 4$  | $\mathbf{x}^2 = \frac{3}{2}$          |
| $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $x = \pm \sqrt{4}$  | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
| $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ |                     |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. | $8x^2 - 3 = 0$                        | 11. | $3x^2 - 12 = 0$    | 12. | $6x^2 - 9 = 0$                        |
|-----|---------------------------------------|-----|--------------------|-----|---------------------------------------|
|     | $8x^2 = 3$                            |     | $3x^2 = 12$        |     | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          |     | $x^2 = 4$          |     | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ |     | $x = \pm \sqrt{4}$ |     | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ |     | $\mathbf{x} = \pm$ |     |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. $8x^2 - 3 = 0$                    | 11. $3x^2 - 12 = 0$  | 12. $6x^2 - 9 = 0$                    |
|---------------------------------------|----------------------|---------------------------------------|
| $8x^2 = 3$                            | $3x^2 = 12$          | $6x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$            | $\mathbf{x}^2 = \frac{3}{2}$          |
| $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $x = \pm \sqrt{4}$   | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
| $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ | $\mathbf{x} = \pm 2$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. $8x^2 - 3 = 0$                    | 11. $3x^2 - 12 = 0$  | 12. $6x^2 - 9 = 0$                    |
|---------------------------------------|----------------------|---------------------------------------|
| $8x^2 = 3$                            | $3x^2 = 12$          | $6x^2 = 9$                            |
| $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$            | $\mathbf{x}^2 = \frac{3}{2}$          |
| $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $x = \pm \sqrt{4}$   | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
| $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ | $\mathbf{x} = \pm 2$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. | $8x^2 - 3 = 0$                        | 11. $3x^2 - 12 = 0$  | 12. $6x^2 - 9 = 0$                    |
|-----|---------------------------------------|----------------------|---------------------------------------|
|     | $8x^2 = 3$                            | $3x^2 = 12$          | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$            | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $x = \pm \sqrt{4}$   | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ | $\mathbf{x} = \pm 2$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the

| 10. | $8x^2 - 3 = 0$                        | 11. $3x^2 - 12 = 0$         | 12. $6x^2 - 9 = 0$                    |
|-----|---------------------------------------|-----------------------------|---------------------------------------|
|     | $8x^2 = 3$                            | $3x^2 = 12$                 | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$                   | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $\mathbf{x} = \pm \sqrt{4}$ | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ | $\mathbf{x} = \pm 2$        |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. | $8x^2 - 3 = 0$                        | 11. | $3x^2 - 12 = 0$      | 12. | $6x^2 - 9 = 0$                        |
|-----|---------------------------------------|-----|----------------------|-----|---------------------------------------|
|     | $8x^2 = 3$                            |     | $3x^2 = 12$          |     | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          |     | $x^2 = 4$            |     | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ |     | $x = \pm \sqrt{4}$   |     | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ |     | $\mathbf{x} = \pm 2$ |     | $\mathbf{x} = \pm$                    |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. | $8x^2 - 3 = 0$                        | 11. $3x^2 - 12 = 0$         | 12. $6x^2 - 9 = 0$                    |
|-----|---------------------------------------|-----------------------------|---------------------------------------|
|     | $8x^2 = 3$                            | $3x^2 = 12$                 | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$                   | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $\mathbf{x} = \pm \sqrt{4}$ | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ | $\mathbf{x} = \pm 2$        | $\mathbf{x} = \pm \frac{\sqrt{6}}{2}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. $8x^2 - $             | <b>3</b> = <b>0 11.</b> | $3x^2 - 12 = 0$      | 12. $6x^2 - 9 = 0$                    |
|---------------------------|-------------------------|----------------------|---------------------------------------|
| $8x^2 =$                  | = 3                     | $3x^2 = 12$          | $6x^2 = 9$                            |
| $x^2 =$                   | $=\frac{3}{8}$          | $x^2 = 4$            | $\mathbf{x}^2 = \frac{3}{2}$          |
| $\mathbf{X} = \pm$        | $\sqrt{\frac{3}{8}}$    | $x = \pm \sqrt{4}$   | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
| $\mathbf{x} = \mathbf{z}$ | $=\frac{\sqrt{6}}{4}$   | $\mathbf{x} = \pm 2$ | $\mathbf{x} = \pm \frac{\sqrt{6}}{2}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. | $8x^2 - 3 = 0$                        | 11. $3x^2 - 12 = 0$  | 12. $6x^2 - 9 = 0$                    |
|-----|---------------------------------------|----------------------|---------------------------------------|
|     | $8x^2 = 3$                            | $3x^2 = 12$          | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$            | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{3}{8}}$ | $x = \pm \sqrt{4}$   | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ | $\mathbf{x} = \pm 2$ | $\mathbf{x} = \pm \frac{\sqrt{6}}{2}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 10. | $8x^2 - 3 = 0$                        | 11. $3x^2 - 12 = 0$  | 12. | $6x^2 - 9 = 0$                        |
|-----|---------------------------------------|----------------------|-----|---------------------------------------|
|     | $8x^2 = 3$                            | $3x^2 = 12$          |     | $6x^2 = 9$                            |
|     | $\mathbf{x}^2 = \frac{3}{8}$          | $x^2 = 4$            |     | $\mathbf{x}^2 = \frac{3}{2}$          |
|     | $\mathbf{X} = \pm \sqrt{\frac{3}{8}}$ | $x = \pm \sqrt{4}$   |     | $\mathbf{x} = \pm \sqrt{\frac{3}{2}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{6}}{4}$ | $\mathbf{x} = \pm 2$ |     | $\mathbf{x} = \pm \frac{\sqrt{6}}{2}$ |

13.  $2x^2 - 7 = 0$  14.  $3x^2 - 16 = 0$  15.  $9x^2 - 4 = 0$
13.  $2x^2 - 7 = 0$  14.  $3x^2 - 16 = 0$  15.  $9x^2 - 4 = 0$ 

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
 14.  $3x^2 - 16 = 0$  15.  $9x^2 - 4 = 0$ 

## **Step 1:** Solve for x<sup>2</sup>.

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 14.$   $3x^2 - 16 = 0$  15.  $9x^2 - 4 = 0$ 

## **Step 1:** Solve for x<sup>2</sup>.

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
14.  $3x^2 - 16 = 0$   
15.  $9x^2 - 4 = 0$ 

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = 14.$   $3x^2 - 16 = 0$   
15.  $9x^2 - 4 = 0$   
 $x^2 = 16$ 

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
15.  $9x^2 - 4 = 0$ 

13. 
$$2x^2 - 7 = 0$$
 14.  $3x^2 - 16 = 0$  15.  $9x^2 - 4 = 0$   
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$ 

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$ 
14.  $3x^2 - 16 = 0$   
15.  $9x^2 - 4 = 0$ 

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$ 
14.  $3x^2 - 16 = 0$   
 $3x^2 = 0$   
15.  $9x^2 - 4 = 0$   
 $x^2 = \frac{7}{2}$ 

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$ 
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$ 
15.  $9x^2 - 4 = 0$ 

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{7}{2}$   
15.  $9x^2 - 4 = 0$   
 $x^2 = 16$ 

Solve each of the following using the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $x^2 = \frac{16}{3}$ 

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$ 

**Step 1:** Solve for x<sup>2</sup>.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $15.$ 

**Step 1:** Solve for x<sup>2</sup>.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $9x^2 = 0$   
 $yx^2 = 0$   
 $yx^2 = 16$ 

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $9x^2 = 4$ 

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$ 
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$ 
15.  $9x^2 - 4 = 0$   
 $9x^2 = 4$   
 $x^2 = \frac{16}{3}$ 

## **Step 1:** Solve for x<sup>2</sup>.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $9x^2 = 4$   
 $x^2 = \frac{4}{9}$ 

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $9x^2 = 4$   
 $x^2 = \frac{4}{9}$ 

## **Step 1:** Solve for x<sup>2</sup>.

13. 
$$2x^2 - 7 = 0$$
  
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 $9x^2 = 4$   
 $x^2 = \frac{4}{9}$ 

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $9x^2 = 4$   
 $x^2 = \frac{4}{9}$ 

**Step 2:** Apply the square root property.

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $9x^2 = 4$   
 $x^2 = \frac{4}{9}$ 

 13.  $2x^2 - 7 = 0$  14.  $3x^2 - 16 = 0$  15.  $9x^2 - 4 = 0$ 
 $2x^2 = 7$   $3x^2 = 16$   $9x^2 = 4$ 
 $x^2 = \frac{7}{2}$   $x^2 = \frac{16}{3}$   $x^2 = \frac{4}{9}$ 

| 13. $2x^2 - 7 = 0$           | 14. | $3x^2 - 16 = 0$               | 15. | $9x^2-4=0$                   |
|------------------------------|-----|-------------------------------|-----|------------------------------|
| $2x^2 = 7$                   |     | $3x^2 = 16$                   |     | $9x^2 = 4$                   |
| $\mathbf{x}^2 = \frac{7}{2}$ |     | $\mathbf{x}^2 = \frac{16}{3}$ |     | $\mathbf{x}^2 = \frac{4}{9}$ |
| $\mathbf{x} = \pm$           |     |                               |     |                              |

13. 
$$2x^2 - 7 = 0$$
  
 $2x^2 = 7$   
 $x^2 = \frac{7}{2}$   
 $x = \pm \sqrt{\frac{7}{2}}$   
14.  $3x^2 - 16 = 0$   
 $3x^2 = 16$   
 $x^2 = \frac{16}{3}$   
15.  $9x^2 - 4 = 0$   
 $9x^2 = 4$   
 $x^2 = \frac{4}{9}$ 

13.  $2x^2 - 7 = 0$   $2x^2 = 7$   $x^2 = \frac{7}{2}$   $x = \pm \sqrt{\frac{7}{2}}$ 14.  $3x^2 - 16 = 0$   $3x^2 = 16$   $x^2 = \frac{16}{3}$ 15.  $9x^2 - 4 = 0$   $9x^2 = 4$  $x^2 = \frac{4}{9}$ 

| 13. $2x^2 - 7 = 0$                    | 14. $3x^2 - 16 = 0$           | 15. $9x^2 - 4 = 0$           |
|---------------------------------------|-------------------------------|------------------------------|
| $2x^2 = 7$                            | $3x^2 = 16$                   | $9x^2 = 4$                   |
| $x^2 = \frac{7}{2}$                   | $\mathbf{x}^2 = \frac{16}{3}$ | $\mathbf{x}^2 = \frac{4}{9}$ |
| $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$ |                               |                              |

| 13. $2x^2 - 7 = 0$                    | 14. $3x^2 - 16 = 0$           | 15. $9x^2 - 4 = 0$           |
|---------------------------------------|-------------------------------|------------------------------|
| $2x^2 = 7$                            | $3x^2 = 16$                   | $9x^2 = 4$                   |
| $x^2 = \frac{7}{2}$                   | $\mathbf{x}^2 = \frac{16}{3}$ | $\mathbf{x}^2 = \frac{4}{9}$ |
| $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$ | $\mathbf{x} = \pm$            |                              |

| 13. $2x^2 - 7 = 0$                    | 14. $3x^2 - 16 = 0$                    | 15. $9x^2 - 4 = 0$           |
|---------------------------------------|--|------------------------------|
| $2x^2 = 7$                            | $3x^2 = 16$                            | $9x^2 = 4$                   |
| $x^2 = \frac{7}{2}$                   | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$ |
| $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$ | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ |                              |

13.  $2x^2 - 7 = 0$   $2x^2 = 7$   $x^2 = \frac{7}{2}$   $x = \pm \sqrt{\frac{7}{2}}$ 14.  $3x^2 - 16 = 0$   $3x^2 = 16$   $x^2 = \frac{16}{3}$   $x = \pm \sqrt{\frac{16}{3}}$ 15.  $9x^2 - 4 = 0$   $9x^2 = 4$  $x^2 = \frac{4}{9}$ 







13.  $2x^2 - 7 = 0$   $2x^2 = 7$   $x^2 = \frac{7}{2}$   $x = \pm \sqrt{\frac{7}{2}}$ 14.  $3x^2 - 16 = 0$   $3x^2 = 16$   $x^2 = \frac{16}{3}$   $x = \pm \sqrt{\frac{16}{3}}$ 15.  $9x^2 - 4 = 0$   $9x^2 = 4$   $x^2 = \frac{4}{9}$   $x = \pm \sqrt{\frac{16}{3}}$  $x = \pm \sqrt{\frac{4}{9}}$ 

13.  $2x^2 - 7 = 0$   $2x^2 = 7$   $x^2 = \frac{7}{2}$   $x = \pm \sqrt{\frac{7}{2}}$ 14.  $3x^2 - 16 = 0$   $3x^2 = 16$   $x^2 = \frac{16}{3}$   $x = \pm \sqrt{\frac{16}{3}}$ 15.  $9x^2 - 4 = 0$   $9x^2 = 4$   $x^2 = \frac{4}{9}$  $x = \pm \sqrt{\frac{4}{9}}$ 



Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in standard radical form.
| 14. $3x^2 - 16 = 0$                    | 15.   | $9x^2 - 4 = 0$  |
|--|---|---|
| $3x^2 = 16$                            |   | $9x^2 = 4$  |
| $\mathbf{x}^2 = \frac{16}{3}$          |   | $\mathbf{x}^2 = \frac{4}{9}$  |
| $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ |   | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$   |
|  | 14. $3x^2 - 16 = 0$<br>$3x^2 = 16$<br>$x^2 = \frac{16}{3}$<br>$x = \pm \sqrt{\frac{16}{3}}$ | 14. $3x^2 - 16 = 0$ 15.<br>$3x^2 = 16$<br>$x^2 = \frac{16}{3}$<br>$x = \pm \sqrt{\frac{16}{3}}$ |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.

| 13. | $2x^2 - 7 = 0$                        | 14. | $3x^2 - 16 = 0$                        | 15. | $9x^2 - 4 = 0$                        |
|-----|---------------------------------------|-----|--|-----|---------------------------------------|
|     | $2x^2 = 7$                            |     | $3x^2 = 16$                            |     | $9x^2 = 4$                            |
|     | $\mathbf{x}^2 = \frac{7}{2}$          |     | $\mathbf{x}^2 = \frac{16}{3}$          |     | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$ |     | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ |     | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{v} = +$                      |     |  |     |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.

| 13. | $2x^2 - 7 = 0$                         | 14. $3x^2 - 16 = 0$                    | 15. | $9x^2 - 4 = 0$                        |
|-----|--|--|-----|---------------------------------------|
|     | $2x^2 = 7$                             | $3x^2 = 16$                            |     | $9x^2 = 4$                            |
|     | $\mathbf{x}^2 = \frac{7}{2}$           | $\mathbf{x}^2 = \frac{16}{3}$          |     | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ |     | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ |  |     |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in standard radical form.

| 13. | $2x^2-7=0$                             | 14. $3x^2 - 16 = 0$                    | 15. | $9x^2 - 4 = 0$                        |
|-----|--|--|-----|---------------------------------------|
|     | $2x^2 = 7$                             | $3x^2 = 16$                            |     | $9x^2 = 4$                            |
|     | $\mathbf{x}^2 = \frac{7}{2}$           | $\mathbf{x}^2 = \frac{16}{3}$          |     | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ |     | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ |  |     |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the solutions in <u>standard radical form</u>.



Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the

solutions in <u>standard radical form</u>.

| <b>13.</b> 2x | $\mathbf{x}^2 - 7 = 0$        | 14. | $3x^2-16=0$                            | 15. | $9x^2-4=0$                            |
|---------------|-------------------------------|-----|--|-----|---------------------------------------|
| 2             | $x^2 = 7$                     |     | $3x^2 = 16$                            |     | $9x^2 = 4$                            |
|               | $\mathbf{x}^2 = \frac{7}{2}$  |     | $\mathbf{x}^2 = \frac{16}{3}$          |     | $\mathbf{x}^2 = \frac{4}{9}$          |
| X             | $=\pm\sqrt{\frac{7}{2}}$      |     | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ |     | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
| X             | $\pm \pm \frac{\sqrt{14}}{2}$ |     |  |     |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root. If the radicand is not a perfect square, then express the

| 13. $2x^2 - 7 = 0$                     | 14. $3x^2 - 16 = 0$                    | 15. $9x^2 - 4 = 0$                    |
|--|--|---------------------------------------|
| $2x^2 = 7$                             | $3x^2 = 16$                            | $9x^2 = 4$                            |
| $\mathbf{x}^2 = \frac{7}{2}$           | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$          |
| $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
| $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ | $\mathbf{x} = \mathbf{\pm}$            |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 13. $2x^2 - 7 = 0$                     | 14. $3x^2 - 16 = 0$                    | 15. $9x^2 - 4 = 0$                    |
|--|--|---------------------------------------|
| $2x^2 = 7$                             | $3x^2 = 16$                            | $9x^2 = 4$                            |
| $\mathbf{x}^2 = \frac{7}{2}$           | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$          |
| $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
| $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ | $\mathbf{x} = \pm \frac{4\sqrt{3}}{3}$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 13. $2x^2 - 7 = 0$                     | 14. $3x^2 - 16 = 0$                    | 15. $9x^2 - 4 = 0$                    |
|--|--|---------------------------------------|
| $2x^2 = 7$                             | $3x^2 = 16$                            | $9x^2 = 4$                            |
| $\mathbf{x}^2 = \frac{7}{2}$           | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$          |
| $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
| $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ | $\mathbf{x} = \pm \frac{4\sqrt{3}}{3}$ |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.



Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 13. | $2x^2 - 7 = 0$                         | 14. | $3x^2 - 16 = 0$                        | 15. | $9x^2 - 4 = 0$                        |
|-----|--|-----|--|-----|---------------------------------------|
|     | $2x^2 = 7$                             |     | $3x^2 = 16$                            |     | $9x^2 = 4$                            |
|     | $x^2 = \frac{7}{2}$                    |     | $\mathbf{x}^2 = \frac{16}{3}$          |     | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  |     | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ |     | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ |     | $\mathbf{x} = \pm \frac{4\sqrt{3}}{3}$ |     |                                       |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 13. | $2x^2 - 7 = 0$                         | 14. $3x^2 - 16 = 0$                    | 15. $9x^2 - 4 = 0$                    |
|-----|--|--|---------------------------------------|
|     | $2x^2 = 7$                             | $3x^2 = 16$                            | $9x^2 = 4$                            |
|     | $x^2 = \frac{7}{2}$                    | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ | $\mathbf{x} = \pm \frac{4\sqrt{3}}{3}$ | $\mathbf{x} = \pm$                    |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 13. | $2x^2 - 7 = 0$                         | 14. $3x^2 - 16 = 0$                    | $15.  9x^2 - 4 = 0$                   |
|-----|--|--|---------------------------------------|
|     | $2x^2 = 7$                             | $3x^2 = 16$                            | $9x^2 = 4$                            |
|     | $x^2 = \frac{7}{2}$                    | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ | $\mathbf{x} = \pm \frac{4\sqrt{3}}{3}$ | $\mathbf{x} = \pm \frac{2}{3}$        |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 13. | $2x^2 - 7 = 0$                         | 14. $3x^2 - 16 = 0$                    | <b>15.</b> $9x^2 - 4 = 0$             |
|-----|--|--|---------------------------------------|
|     | $2x^2 = 7$                             | $3x^2 = 16$                            | $9x^2 = 4$                            |
|     | $\mathbf{x}^2 = \frac{7}{2}$           | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ | $\mathbf{x} = \pm \frac{4\sqrt{3}}{3}$ | $\mathbf{x} = \pm \frac{2}{3}$        |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 13. | $2x^2 - 7 = 0$                         | 14. $3x^2 - 16 = 0$                    | 15. $9x^2 - 4 = 0$                    |
|-----|--|--|---------------------------------------|
|     | $2x^2 = 7$                             | $3x^2 = 16$                            | $9x^2 = 4$                            |
|     | $\mathbf{x}^2 = \frac{7}{2}$           | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ | $\mathbf{x} = \pm \frac{4\sqrt{3}}{3}$ | $\mathbf{x} = \pm \frac{2}{3}$        |

Step 3: Express the solutions in 'best form'. If the radicand is a perfect square, then evaluate the square root.

| 13. | $2x^2 - 7 = 0$                         | 14. $3x^2 - 16 = 0$                    | 15. $9x^2 - 4 = 0$                    |
|-----|--|--|---------------------------------------|
|     | $2x^2 = 7$                             | $3x^2 = 16$                            | $9x^2 = 4$                            |
|     | $x^2 = \frac{7}{2}$                    | $\mathbf{x}^2 = \frac{16}{3}$          | $\mathbf{x}^2 = \frac{4}{9}$          |
|     | $\mathbf{x} = \pm \sqrt{\frac{7}{2}}$  | $\mathbf{x} = \pm \sqrt{\frac{16}{3}}$ | $\mathbf{x} = \pm \sqrt{\frac{4}{9}}$ |
|     | $\mathbf{x} = \pm \frac{\sqrt{14}}{2}$ | $\mathbf{x} = \pm \frac{4\sqrt{3}}{3}$ | $\mathbf{x} = \pm \frac{2}{3}$        |

