

# Algebra I

## 11-10

### Simple Radical Equations

Solve. (pg. 548)

$$1) \sqrt{x} = 3$$

$$x = 9$$

$$\{9\}$$

$$7) 1 = \sqrt{m} - 3$$

$$1 + 3 = \sqrt{m} - 3 + 3$$

$$4 = \sqrt{m}$$

$$16 = m$$

$$\{16\}$$

$$13) \sqrt{x+1} = 3$$

$$x+1 = 9$$

$$x+1-1 = 9-1$$

$$x = 8$$

$$\{8\}$$

Important!

$$\sqrt{x^2} = |x|$$

$$\sqrt{x^2} = x$$

$$\sqrt{x^2} = 9$$

$$|x| = 3$$

$$x = \pm 3$$

$$23) \sqrt{x} = (6\sqrt{7})^2$$

$$x = 9 \cdot 49$$

$$x = 9 \cdot 7$$

$$x = 63$$

$$\{63\}$$

$$29) 4^2 = \sqrt{\frac{7k-10}{9}}$$

$$16 = \frac{7k-10}{9}$$

$$144 = 7k-10$$

$$144+10 = 7k-10+10$$

$$154 = 7k$$

$$22 = k$$

$$\{22\}$$

## Assignment:

Pg. 548  
1-32 all

(any answer with a fraction  
or a radical, do part b,  
round to hundredths)