

Name: \_\_\_\_\_

Date: \_\_\_\_\_

|                          |                        |
|--------------------------|------------------------|
| <b>Learning Goal 6.1</b> | I can solve equations. |
|--------------------------|------------------------|

**Example** Solve the following equations.

B  
E  
D  
M  
A  
S

$$0.1m + 23.2 = 25.5$$

$$-23.2 \quad -23.2$$

$$\frac{0.1m}{0.1} = \frac{2.3}{0.1}$$

$$m = 23$$

$$1.1n - 17.7 = 31.2$$

$$+17.7 \quad +17.7$$

$$\frac{1.1n}{1.1} = \frac{48.9}{1.1}$$

$$n = 45.\overline{45}$$

$$42.1 = 18.9 - 4.2p$$

$$-18.9 \quad -18.9$$

$$\frac{23.2}{-4.2} = \frac{-4.2p}{-4.2}$$

$$-5.52 = p$$

$$p = -5.52$$

$$76.5 = -5.3 + (-2.2q)$$

$$+5.3 \quad +5.3$$

$$\frac{81.8}{-2.2} = \frac{-2.2q}{-2.2}$$

$$-37.18 = q$$

$$q = -37.18$$

$$3 \times \left( \frac{4}{3}r \right) = (16) \times 3$$

$$\frac{4r}{4} = \frac{48}{4}$$

$$r = 12$$

$$\left( \frac{3}{4} \right) \left( \frac{4}{3}r \right) = \left( \frac{16}{1} \right) \left( \frac{3}{4} \right)$$

$$r = 12 \quad \text{or} \quad r = \frac{48}{4} = 12$$

$$\frac{2}{3}s - 9 = 11$$

$$+9 \quad +9$$

$$3 \times \left( \frac{2}{3}s \right) = (20) \times 3$$

$$\frac{2s}{2} = \frac{60}{2}$$

$$s = 30$$

$$3 \times \left[ \frac{(2s - 9)}{3} \right] = (11) \times 3$$

$$2s - 9 = 33$$

$$+9 \quad +9$$

$$\frac{2s}{2} = \frac{42}{2}$$

$$s = 21$$

$$-13 = 13 - \frac{t}{3}$$

$$-13 \quad -13$$

$$3 \times (-26) = \left( -\frac{t}{3} \right) \times 3$$

$$-1 \times (-78) = (-t) \times -1$$

$$78 = t$$

$$t = 78$$