

3.1

$$x + 4 = 9$$

$$\boxed{5} + 4 = 9$$

$$\begin{array}{rcl} x + 4 & = & 9 \\ -4 & & -4 \\ \hline x & = & 5 \end{array}$$

Subtraction Property  
of Equality

$$\begin{array}{rcl} x + 4 & = & 9 \\ -4 & & -4 \\ \hline x & = & 5 \end{array}$$

$$x - 8 + 8 = 3 + 8$$

$$x = 11$$

Addition Property  
of Equality

$$\cancel{5} \quad \begin{matrix} -5 \\ 5 - x = 7 \end{matrix} \text{ Subtraction Prop of } =$$

$$\begin{matrix} -x \\ -1 \end{matrix} = \begin{matrix} 2 \\ -1 \end{matrix} \text{ Division Property of Equality}$$

$$\begin{matrix} -9 \\ -1 \end{matrix} = \begin{matrix} +9 \\ +1 \end{matrix}$$

$$\begin{matrix} +9 \\ +1 \end{matrix} = \begin{matrix} -9 \\ -1 \end{matrix}$$

$$x = -2$$

$$6 \cdot \begin{matrix} -1 \\ -6 \end{matrix}$$

$(-1) - x = 2(-1)$  Multiplication  
 $x = -2$  Property of Equality

$$5 - \begin{matrix} +x \\ -x \end{matrix} = 7 + x$$

$$5 - 7 = x + 7 \quad \begin{matrix} -7 \\ 7 \end{matrix}$$

Zero out

$$-2 = x$$

$$13 - x = 8$$

*-8*      *-8*      Subtraction  
Property of Equality

$$5 - x = 0$$

*+x*      *+x*      Addition  
Property of Equality

$$5 = x$$

$$x = 5$$

Symmetric  
Property of Equality

$$h + 9.1 = 5.3$$

$$h + \cancel{9}^{\textcolor{green}{-9}} = \cancel{5}^{\textcolor{blue}{5}}$$

$$h = -4$$

$$h + \cancel{9.1}^{\textcolor{green}{-9.1}} = \cancel{5.3}^{\textcolor{blue}{5-9}}$$

$$h = -3.8$$

$$\begin{array}{r} 5-9 \\ -9+5 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 8.1 \\ -5.3 \\ \hline 3.8 \end{array}$$

$$x + \cancel{7.3}^{\textcolor{green}{-7.3}} = \cancel{-2.9}^{\textcolor{green}{-7.3}}$$

$$x = -10.2$$

$$\begin{array}{r} 7.3 \\ 2.9 \\ \hline 10.2 \end{array}$$

$$x + \cancel{8.1}^{\textcolor{green}{-8.1}} = \cancel{4.7}^{\textcolor{blue}{18.1}}$$

$$x = -3.4$$

$$\begin{array}{r} 18.1 \\ -4.7 \\ \hline 3.4 \end{array}$$

$$x + \frac{\cancel{2}^{\textcolor{green}{-2}}}{\cancel{3}^{\textcolor{blue}{3}}} = \frac{1}{5} \frac{\cancel{2}^{\textcolor{green}{-2}}}{\cancel{3}^{\textcolor{blue}{3}}}$$

$$x = -\frac{7}{15}$$

$$\begin{array}{r} \frac{2}{3} - \frac{1}{5} \\ \frac{10}{15} - \frac{3}{15} \\ \hline \frac{7}{15} \end{array}$$

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$$20 - 80 \times 4$$

$$\begin{array}{r} & +4 & +4 \\ 20. & a - 4 = -10 \end{array}$$

$$a = -6$$

Check

$$-6 - 4 = -10$$

$$-10 = -10$$