

**Section 3.3 Linear Equations and Inequalities with Fractions**

1. Use Equivalent Equations or Clearing the Fractions to write an equation without fractions and then solve it. State your solution set.

a.  $\frac{7}{10} - \frac{1}{10}c = 8$

b.  $\frac{4}{5}B - 49 = -\frac{5}{6}B$

c.  $\frac{1}{3}m - \frac{2}{5} = \frac{3}{4}m - \frac{7}{6}$

2. Remove the fractions from the inequality and solve it. Show your solution as a number line graph, interval and solution set.

a.  $\frac{x}{9} - 4 \leq \frac{x}{5}$

b.  $\frac{y-10}{8} > \frac{y+9}{6}$

### Section 3.4 Isolating a Linear Variable (Solving Literal Equations)

3. Solve the following equations for the specified variable.

a. Solve for x:   $x$  -  = 

b. Solve for w:  $A = l \cdot w$

c. Solve for C:  $F = \frac{9}{5}C + 32$

More Practice

4. Clear the fractions and solve the equation or inequality.

a.  $\frac{1}{2}w - 3 = \frac{11}{5} - \frac{3}{4}w$

b.  $\frac{1}{2}t - \frac{3}{4} < -\frac{2}{5}t + \frac{3}{5}$

5. Solve each equation for the specified variable.

a.  $C = \pi d$ , for  $d$

b.  $A = \frac{1}{2}bh$ , for  $b$

c.  $Ax + By = C$ , for  $y$