

$$1) \frac{1}{12} \cdot -\frac{48}{15} = 2x \cdot \frac{1}{2}$$

$$-\frac{4}{15} = x$$

$$2) \frac{8}{8}r - 2 - \frac{1r}{8} = \frac{4}{5}$$

$$\begin{array}{r} \boxed{+2} \quad \boxed{+\frac{10}{5}} \\ \hline \frac{8}{8} \cdot \frac{7}{8}r = \frac{14}{5} \cdot \frac{8}{8} \end{array}$$

$$r = \frac{16}{5} \text{ or } 3\frac{1}{5}$$

$$3) -2\frac{1}{5}x = 3$$

$$-\frac{5}{11} \cdot -\frac{11}{5}x = \frac{3}{1} \cdot -\frac{5}{11}$$

$$x = -\frac{15}{11} \text{ or } -1\frac{4}{11}$$

$$4) -\frac{7}{15} = x - \frac{4}{15}$$

$$+\frac{4}{15} \quad +\frac{4}{15}$$

$$-\frac{3}{15} = x$$

$$-\frac{1}{5} = x$$

$$5) \frac{2}{5} - \frac{r}{6} = -\frac{1}{5}$$

$$-\frac{2}{5} \quad -\frac{2}{5}$$

$$-\frac{6}{1} \cdot -\frac{1}{6}r = -\frac{3}{5} \cdot -\frac{6}{1}$$

$$r = \frac{18}{5} \text{ or } 3\frac{3}{5}$$

$$6) -\frac{8}{3} \cdot -\frac{3}{8}a = -\frac{5}{3} \cdot -\frac{28}{3}$$

$$a = \frac{10}{9} \text{ or } 1\frac{1}{9}$$

$$7) \frac{3}{10} = 12x - \frac{1}{5} + 3x$$

$$\begin{array}{r} \boxed{+\frac{2}{10}} \quad \boxed{+\frac{1}{5}} \\ \hline \frac{1}{153} \cdot \frac{51}{10} = \frac{15x}{1} \cdot \frac{1}{15} \end{array}$$

$$\frac{1}{30} = x$$

$$8) \frac{1}{6}y - \frac{6}{6}y = \frac{7}{9} - \frac{5}{9}$$

$$-\frac{6}{5} \cdot -\frac{5}{6}y = \frac{2}{9} \cdot -\frac{6}{5}$$

$$y = -\frac{4}{15}$$