

5.1.2 # 11-13, 18-21

5-12 $\frac{x}{3} + \frac{x}{5} = 16$ LCD: 15

5-13

a.) $21\left(\frac{a}{7} + \frac{a}{3} = 10\right)$ LCD: 21

d.) $60\left(\frac{b+3}{3} - \frac{b}{4} = \frac{b-2}{5}\right)$ LCD: 60

$3\cancel{21}\left(\frac{\cancel{a}}{\cancel{7}}\right) + \cancel{7}\left(\frac{\cancel{a}}{\cancel{3}}\right) = 21(10)$

$\cancel{60}\left(\frac{\cancel{b+3}}{\cancel{3}}\right) - \cancel{60}\left(\frac{\cancel{b}}{\cancel{4}}\right) = \cancel{60}\left(\frac{\cancel{b-2}}{\cancel{5}}\right)$

$3(a) + 7(a) = 210$

$20(b+3) - 15(b) = 12(b-2)$

$10a = 210$

$20b + 60 - 15b = 12b - 24$

$\begin{array}{r} 10 \quad 10 \\ \hline a = 21 \end{array}$

$5b + 60 = 12b - 24$

$-\cancel{5b} \quad -\cancel{5b}$

$60 = 7b - 24$

$\begin{array}{r} +24 \quad +24 \\ \hline 84 = 7b \end{array}$

$\begin{array}{r} 84 = 7b \\ \hline 7 \quad 7 \\ \hline 12 = b \end{array}$

b.)

c.)

5-11