

$$\begin{array}{r} -6d = d + 4 \\ -d \quad -d \end{array}$$

$$\begin{array}{r} -7d = 4 \\ \frac{-7}{-7} \quad \frac{-7}{-7} \\ d = -\frac{4}{7} \end{array}$$

$$\begin{array}{r} 2(c-6) = 9c + 2 \\ 2c - 12 = 9c + 2 \end{array}$$

$$\begin{array}{r} -2c \quad -2c \\ -12 = 7c + 2 \\ -2 \quad -2 \\ -14 = 7c \\ \frac{-14}{7} \quad \frac{7c}{7} \\ -2 = c \end{array}$$

$9 + 5n = 5n - 1$
 same variable term,
 different constant terms
 no solution

$9 + 5x = 7x + 9 - 2x$
 $9 + 5x = 5x + 9$
 same variable
 term
 same constant
 identity

$$\left(\frac{2}{3}x - \frac{5}{8}x = 26\right) 24$$

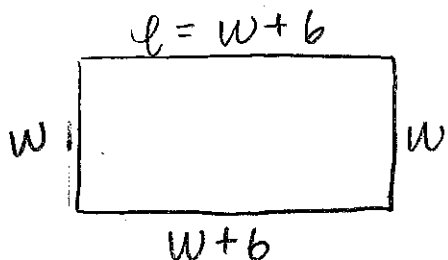
$$\frac{8}{24} \cdot \frac{2}{3}x - \frac{3}{24} \cdot \frac{5}{8}x = 24 \cdot 26$$

$$\begin{array}{r} 16x - 15x = 624 \\ x = 624 \end{array}$$

$$\left(\frac{n}{4} + \frac{n}{2} = \frac{5}{8}\right) 8$$

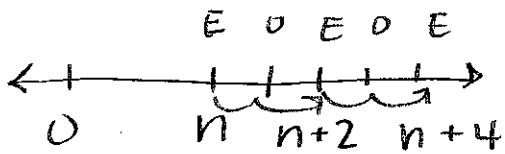
$$\frac{2}{8} \cdot \frac{n}{4} + \frac{4}{8} \cdot \frac{n}{2} = \frac{1}{8} \cdot \frac{5}{8}$$

$$\begin{array}{r} 2n + 4n = 5 \\ 6n = 5 \\ n = 5/6 \end{array}$$



$$\begin{array}{r} 24 = w + b + w + w + b + w \\ 24 = 4w + 12 \\ -12 \quad -12 \\ 12 = 4w \\ \frac{12}{4} \quad \frac{4w}{4} \\ 3 = w \end{array}$$

$$l = w + b \quad l = 9 \text{ cm}$$



$$n + n + 2 + n + 4 = 72$$

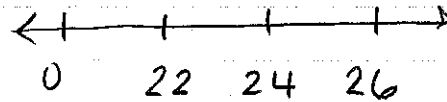
$$3n + 6 = 72$$

$$\begin{array}{r} -6 \quad -6 \\ 3n + 6 = 72 \end{array}$$

$$\underline{3n = 66}$$

$$\underline{\quad 3 \quad 3}$$

$$n = 22$$



	rate	time	$d = rt$
canoe	10	t	$10t$
boat	22	$t - 2$	$22(t - 2)$

$$10t = 22(t - 2)$$

$$10t = 22t - 44$$

$$\begin{array}{r} -22t \quad -22t \\ 10t = 22t - 44 \end{array}$$

$$\underline{-12t = -44}$$

$$\underline{\quad -12 \quad -12}$$

$$t = 3 \frac{8}{12} = 3 \frac{2}{3} = 3 \text{ hours, } 40 \text{ minutes : canoe}$$

$$1 \text{ hour, } 40 \text{ minutes : boat}$$

	rate	time	$d = rt$
to	20	t	$20t$
home	40	$1.5 - t$	$40(1.5 - t)$

$$20t = 40(1.5 - t)$$

$$20t = 60 - 40t$$

$$\begin{array}{r} +40t \quad \quad +40t \\ 20t = 60 - 40t \end{array}$$

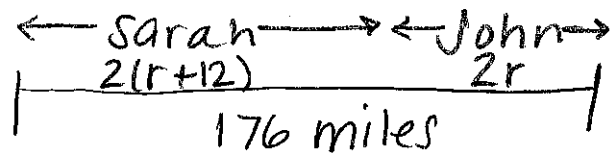
$$\underline{60t = 60}$$

$$\underline{\quad 60 \quad 60}$$

$$t = 1 \text{ hour to work}$$

$$30 \text{ minutes home from work}$$

	rate	time	d=rt
sarah	$r + 12$	2	$2(r+12)$
John	r	2	$2r$



$$2(r+12) + 2r = 176$$

$$2r + 24 + 2r = 176$$

$$4r + 24 = 176$$

$$\begin{array}{r} -24 \\ 4r + 24 = 176 \\ \hline 4r = 152 \end{array}$$

$$\frac{4r}{4} = \frac{152}{4}$$

$r = 38$ mph : John
 50 mph : Sarah

$$\begin{array}{r} y - 4 = 3x - 8 \\ + 8 \qquad + 8 \end{array}$$

$$\frac{y+4}{3} = \frac{3x}{3}$$

$$\frac{y+4}{3} = x$$

or

$$\frac{y}{3} + \frac{4}{3} = x$$

$$\begin{array}{r} m - hp = d \\ -m \qquad -m \end{array}$$

$$\frac{-hp}{-h} = \frac{d-m}{-h}$$

$$p = -\left(\frac{d-m}{h}\right)$$

or

$$p = \frac{-d+m}{h}$$

or

$$p = \frac{-d}{h} + \frac{m}{h}$$

$$F = \frac{n}{4} + 37$$

$$4(F-37) = \frac{n}{4} \cdot 4$$

$$4(F-37) = n$$

$$4F - 148 = n$$

$$(4+2) - \frac{3}{7} \cdot 12$$

