Solve.

$$\frac{2m-3}{4}+6=11$$

$-6 \quad -6$

$4 \cdot \frac{2m-3}{4} = 5 \cdot 4$

$2m-3 = 20$

$+3 \quad +3$

$2m = 23$

$m = 11.5$

subtract 6 before multiplying by 4!

1. Solve for L $\quad A = LW$

$\frac{A}{W} = \frac{LW}{W}$

2. Solve for b $\quad y = mx + b$

$-mx \quad -mx$

$y - mx = b$

3. Solve for h $\quad 2 \cdot A = \frac{1}{2}bh \cdot 2$

$\frac{2A}{b} = \frac{bh}{b}$

4. Solve for t $\quad I = prt$

$\frac{I}{Pr} = \frac{prt}{Pr}$

5. Solve for x_1 $\quad 2M = \frac{x_1 + x_2}{2} \cdot 2$

$2M - x_2 = x_1$

$2M = x_1 + x_2$

$-x_2 \quad -x_2$

6. Solve for y $\quad Ax + By = C$ $-Ax$

$-Ax$

$\frac{By}{B} = \frac{C - Ax}{B}$

Solve for A

$$A + R = 5(C - 2A)$$

$A + R = 5C - 10A$

$+10A \qquad +10A$

$11A + R = 5C$

$\quad -R \quad -R$

$\frac{11A}{11} = \frac{5C - R}{11}$

$$A = \frac{5C - R}{11}$$

Solve for W

$$K = R + M(W - A)$$

$-R \quad -R$

$K - R = mW - mA$

$+mA \qquad +mA$

$\frac{K - R + mA}{m} = \frac{mW}{m}$

$$W = \frac{K - R + mA}{m}$$

Alternative solution:

Solve for W

$$K = R + M(W - A)$$

$-R \quad -R$

$\frac{K - R}{m} = \frac{m(W - A)}{m}$

Divide by M instead of Distributing it.

$\frac{K - R}{m} = W - A$

$+A \qquad +A$

$$W = \frac{K - R}{m} + A$$

Solve for K

$$A = B + \frac{K - R}{E}$$

$-B \quad -B$

$E(A - B) = \frac{K - R}{E} \cdot E$

$E(A - B) = K - R$

$+R \qquad +R$

$$K = E(A - B) + R$$

Hwk #12

Pages 113-114

Problems 1-5, 7, 12, 24, 26, 31, 33, 35, 39

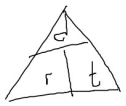
Due Thursday

Work on the Distance/Rate/Time problems.

Use this formula to answer the following problems: $d = rt$

d =distance r =rate(speed/velocity) t =time

1. You drove 261 miles in $4\frac{1}{2}$ hours. Find your rate of travel



$\frac{261}{4.5} = \frac{r\ 4.5}{4.5}$ 58 mph

2. You drove 65 mph for 6 hours. Find the distance you traveled.

$d = 65 \cdot 6$

390 mi

3. You drove 306 miles at a constant rate of 72 mph. Find the time you were driving.

$\frac{306}{72} = \frac{72t}{72}$ 4.25 h = t

4. You flew round-trip from Detroit to Los Angeles. What is true about the distance traveled from Detroit to LA and the distance traveled on your return trip?

Same distance

5. You left the house on your bike. I left the house an hour later on my bike and finally caught you.

a) If we define t as the amount of time you were riding your bike then what expression would represent the amount of time I was riding my bike?

$t - 1$

b) What is true about the distance each of us traveled once I've caught up to you?

Same

6. Marcus and his brother stood back-to-back. Marcus walked 4 ft/sec. Starting at the same time, his brother walked 6 ft/sec in the opposite direction. How far apart are they after nine seconds.

$(6)(9) =$ 54'

$(4)(9) =$ 36'

$54 + 36 =$ 90 Ft