2.1-2.4 Worksheet

1. $y = 4.2x$

a) $y = 4.2(5) = 21$

b) $3/4 = 4.2x$

$0.179 = x$

c) $1.05 = 4.2x$

$0.25 = x$

d) $y = 3/4(4.2)$

$y = 3.15$

2. percents you do $\frac{\%}{100} = \frac{is}{of}$

a) $\frac{75}{100} = \frac{x}{68}$

$75(68) = 100x$

$51 = x$

b) $\frac{120}{100} = \frac{x}{37}$

$120(37) = 100x$

$44.4 = x$

3. $\frac{202 \text{ miles}}{1 \text{ hr}}\left(\frac{5280 \text{ ft}}{1 \text{ mile}}\right)\left(\frac{1 \text{ hr}}{60 \text{ min}}\right)\left(\frac{1 \text{ min}}{60 \text{ sec}}\right) = \frac{1066560}{3600} = \boxed{296.3 \text{ ft/sec}}$

4. $\frac{60 \text{ miles}}{1 \text{ hr}}\left(\frac{1.61 \text{ km}}{1 \text{ mile}}\right) = 96.6 \text{ km/hr}$

HW 13

p 118 # 4, 5, 6a, 6c, 7a, 10, 12

4. a) $14 = 3.5x$

divide both sides by 3.5

$\frac{14}{3.5} = \frac{3.5x}{3.5}$

$4 = x$

b) $8x = 45(0.62)$

multiply 45 by 0.62 the divide by 8

$\frac{8x}{8} = \frac{27.9}{8}$

$x = 3.4875$

c) $\frac{x}{7} = 0.375$

multiply both sides by 7

$\frac{x}{7} = 0.375 \cdot 7$

$x = 2.625$

d) $\frac{12}{x} = \frac{0.8}{1}$

cross multiply

$0.8x = 12$

divide by 0.8 on both sides

$x = 15$

5. $C = 1.25f$ $C \rightarrow$ cost, $f \rightarrow$ fabric in yards

a) $C = 1.25(2.25)$

$C = \$2.81$

b) $5 = 1.25f$

4 yards $= f$

c) $1.25

HW 13, A1

10. $\frac{3mi}{1.5h} = \frac{2mi}{h}$

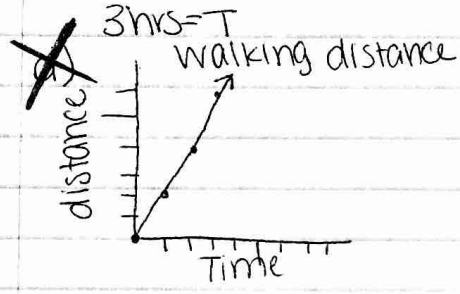
a) 2 miles

b) 4 miles

c) ~~D = 2(T)~~

$6 = 2T$

$3hrs = T$



e) 2 miles, your speed

f) D = distance $D = 2T$

T = time

12. a) $\frac{30 \cancel{km}}{1hr}\left(\frac{1mile}{1.609\cancel{km}}\right) = 80.796 mph$

b) $\frac{25 \cancel{miles}}{1hour}\left(\frac{1.609km}{1\cancel{mile}}\right) = 40.23 km/hr$

c) $\frac{65 \cancel{miles}}{hr}\left(\frac{1.609km}{1\cancel{mile}}\right) = 104.59 \approx 104 km/hr$