Homework
6-94 to 6-99

6-94

a) alternate interior

$5x+3 = 4x+9$

$x = 6$

b) c and q are supplementary

$180 - 114 = 66$

$66°$

c) g and q are same side interior (supplementary)

$180 - 88 = 92$

$92°$

6-95

a) $y = \frac{6}{5}x - 3$

b) $y = -\frac{1}{4}x + 4.5$

c) $y = \frac{1}{3}x$

d) $y = 2$

6-96

a) Similar

$\frac{8}{13} = \frac{13}{13+x}$

$8(13+x) = 169$

$104 + 8x = 169$

$8x = 65$

$x = 8.125$

b) not enough info

c) Similar

$\frac{6}{8} = \frac{8}{x}$

$6x = 64$

$x = 10.\overline{6}$

6-97

a) Triangle Angle Sum

$x+19+4x+28+3x+13=180$

$8x+60=180$

$8x=120$

$x=15$

b) Isosceles △

$6k+3=3k+18$

$3k=15$

$k=5$

c) parallelogram

$4t+13=8t-23$

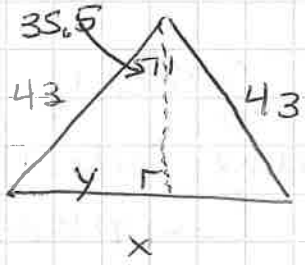
$36=4t$

$9=t$

$$\begin{array}{r} 180 \\ -\ 49 \\ \hline 131 \end{array}$$

$w=131$

d) isosceles △



$\sin 35.5 = \frac{y}{43}$

$y \approx 24.97$ (2)

So $x \approx 49.94$

6-98

a) $\frac{1}{2}(4)+\frac{1}{2}(-7)=$

$\frac{4}{2}+\frac{-7}{2}=\frac{-3}{2}=-1.50$

b) $8(-1.5)=-12$ lose $12

6-99

(-2,-5) (6,3)

$\sqrt{(-2-6)^2+(-5-3)^2}$ B

$\sqrt{64+64}=\sqrt{128}=8\sqrt{2}$

$64 \cdot 2$