

9.1.1.

Hwk

9-8)

a) $m\angle 2 = 63^\circ$

$m\angle 3 = 117^\circ$

(lines are // (Parallel), alternate interior angles are = supplementary angles = 180°)

b) $3x - 18^\circ = 74^\circ$

$$\begin{array}{r} +18 \quad +18 \\ \hline \end{array}$$

$$\frac{3x}{3} = \frac{92}{3}$$

$x = 30.67^\circ$

(lines are // and corresponding angles are =)

c) $3x - 9^\circ = x + 25^\circ$

$$\begin{array}{r} +9 \quad +9 \\ \hline \end{array}$$

$$3x = x + 34^\circ$$

$$\begin{array}{r} -x \quad -x \\ \hline \end{array}$$

$$\frac{2x}{2} = \frac{34^\circ}{2}$$

$x = 17^\circ$

$$m\angle 2 = 3x - 9$$

$$= 3(17) - 9$$

$$= 51 - 9$$

$$m\angle 2 = 42^\circ$$

(lines are //, alternate interior angles are =)

(substitution)

9-9.) your methods and conjectures might be different than mine. Make sure you can explain how you got your answer.

$$m\angle 1 = 53^\circ$$

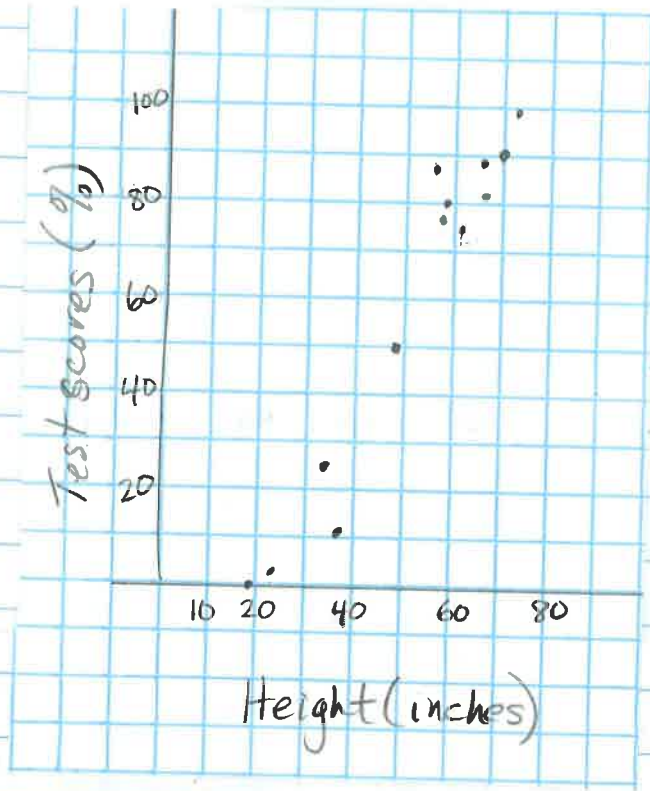
$$m\angle 2 = 72^\circ$$

$$m\angle 3 = 55^\circ$$

$$m\angle 4 = 127^\circ$$

$$m\angle 6 = 55^\circ$$

9-10)



- a) Yes, positive association.
- b) Yes
- c) No
- d) short people might be young and not yet have learned to spell very well

9-11)

$$\frac{3}{4}x = 61.5$$

$$\left(\frac{4}{3}\right)\left(\frac{3}{4}\right)x = 61.5\left(\frac{4}{3}\right)$$

$$x = \frac{246}{3}$$

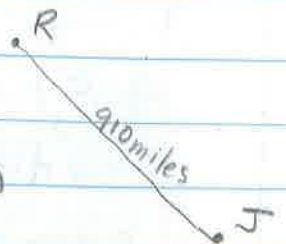
x = 82 miles to get home

9-12) Ryan

$$\frac{245}{3.5} = 70 \text{ mph}$$

Janelle

$$\frac{260}{4} = 65 \text{ mph}$$



$$910 - 245 - 260 = 405 \text{ miles apart}$$

$$\frac{405}{70} + \frac{405}{65} = 3 \text{ hours}$$

12 noon + 3 hours = 3 pm

9-13) SKIP