

#169 R_g 472 #1-5 R_g 444 13

$$1) \frac{\sin 85.4}{12.5} = \frac{\sin 50.6}{b} \quad b = \overline{AC} = 9.7 \text{ cm}$$

$$2) \frac{\sin 55.3}{8.13} = \frac{\sin P}{8.83} \quad m\angle P = 63.2^\circ$$

$$3) \frac{\sin 37.0}{4.7} = \frac{\sin X}{6.0} \quad m\angle X \approx 50.2^\circ$$

$$m\angle Z = 180 - 37.0 - 50.2 \approx 92.8^\circ$$

$$4) \frac{\sin 37.0}{4.7} = \frac{\sin 92.8}{c} \quad c = \overline{XY} = 7.8 \text{ cm}$$

5) a) $B = 25.5^\circ$ $BC \approx 6.4 \text{ cm}$ $AB \approx 8.35 \text{ cm}$

b) $J \approx 38.8^\circ$ $L \approx 33.3^\circ$ $KJ \approx 4.77 \text{ cm}$

$$13 a) \frac{11-5}{14-6} = \frac{6}{8} = \frac{3}{4}$$

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

$$17 = \frac{3}{4}(22) + b$$

$$17 = 16.5 + b$$

$$y = \frac{3}{4}x + \frac{1}{2}$$

$$b = \frac{1}{2}$$

$$b) \frac{x-6}{4} = t$$

$$y = 5 + 3\left(\frac{x-6}{4}\right)$$

$$y = 5 + \frac{3x-18}{4}$$

$$y = 5 - 4.5 + \frac{3}{4}x$$

SAME EQUATION