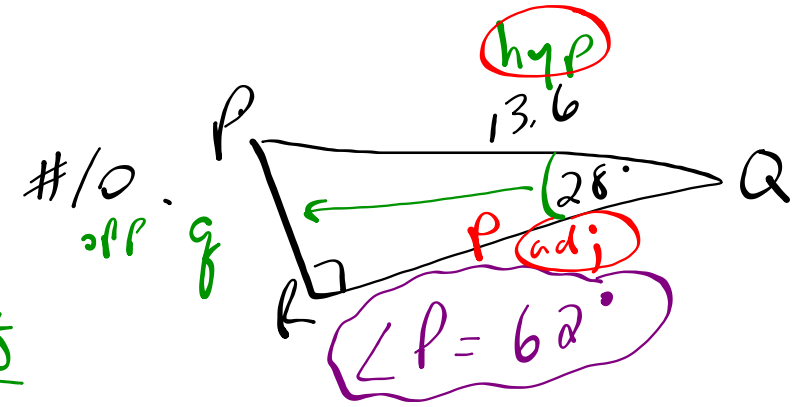
HW???

10.7

#10.



$\sin 28° = \frac{q}{13.6}$

$13.6 \sin 28 = q$

$6.38 = q$

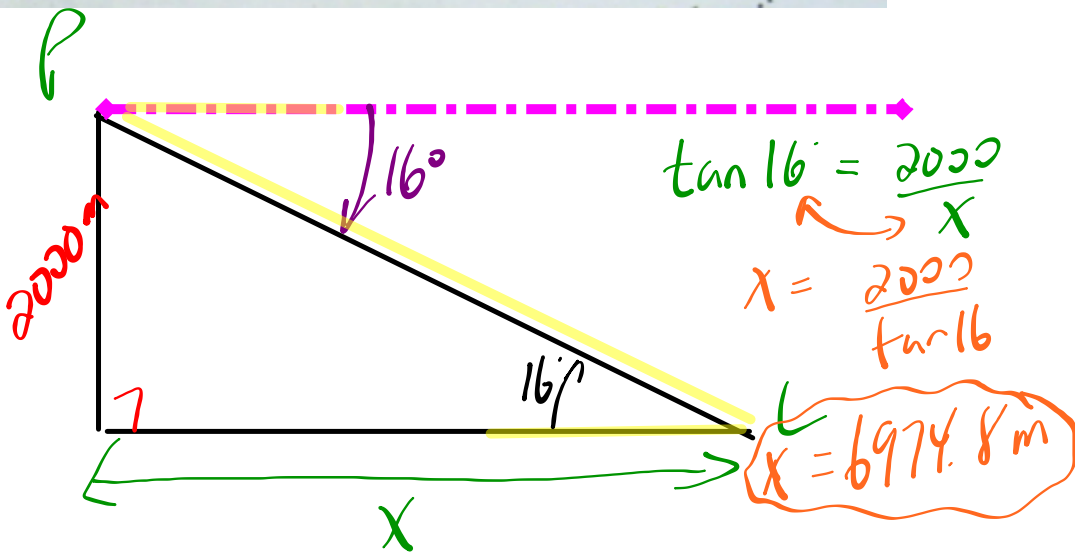
$\cos 28° = \frac{p}{13.6}$

$13.6 \cos 28 = p$

$12.01 = p$

B Remember: Use a calculator to help you.

3. A search plane at an altitude of 2000 m determines the angle of depression of a disabled power launch to be 16°. What is the horizontal distance of the plane from the power launch?

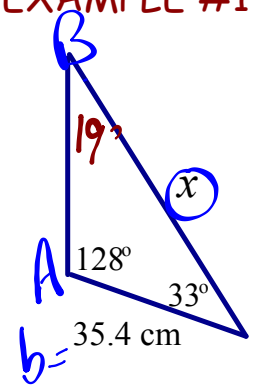


$\tan 16° = \frac{2000}{x}$

$x = \frac{2000}{\tan 16}$

$x = 6974.8\ m$

EXAMPLE #1 - Finding a side.



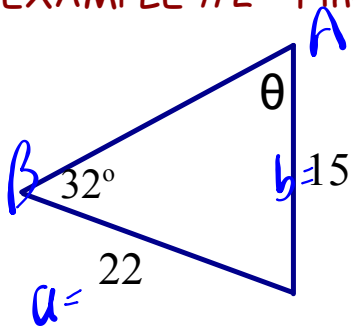
$\frac{a}{\sin A} = \frac{b}{\sin B}$

$\frac{x}{\sin 128^\circ} = \frac{35.4}{\sin 19^\circ}$

$x = 85.68\text{ cm}$

NOTE → Trig Ratio go to 4 places

EXAMPLE #2 - Finding an angle.



$\frac{\sin A}{a} = \frac{\sin B}{b}$

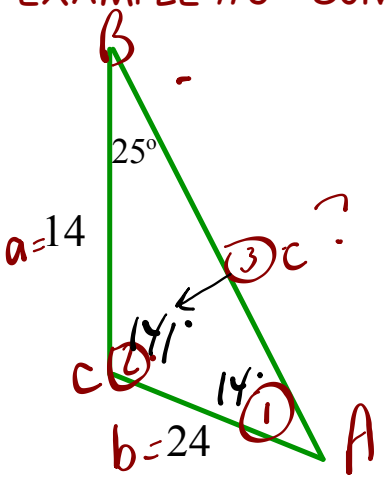
$\frac{22 \sin\theta}{22} = \frac{22 \sin 32^\circ}{15}$

$\sin\theta = (0.7772)$

$\sin^{-1}$

$\theta = 51^\circ$

EXAMPLE #3 - Solve the triangle.



① $\frac{14\sin A}{14} = \frac{14\sin 25^\circ}{24}$

$\sin^{-1}\sin A = \sin^{-1}(0.2465)$

$\angle A = 14^\circ$

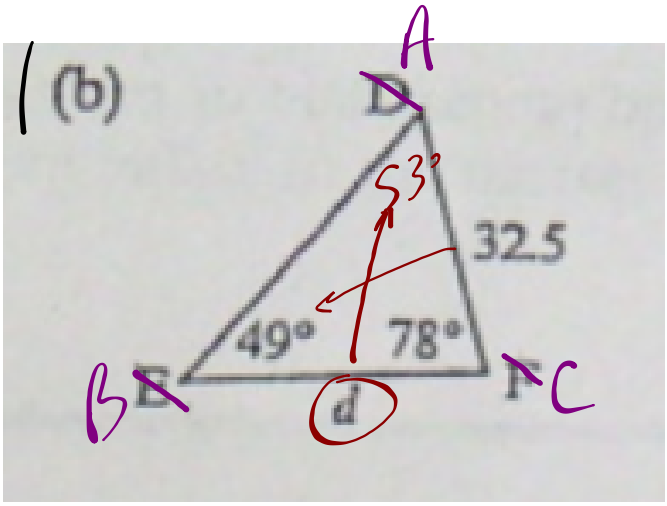
② $\angle C = 141^\circ$

③ $\frac{c}{\sin 141^\circ} = \frac{24}{\sin 25^\circ}$ $\sin 141^\circ$

$c = 35.7$

HW: 10.9 #1-4

(b)



$$\frac{d \sin 53^\circ}{\sin 53^\circ} = \frac{32.5 \sin 53^\circ}{\sin 49^\circ}$$

$$d = 34.39$$