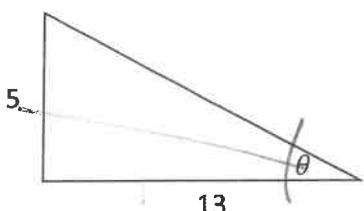


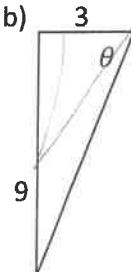
1. State the value of $\tan \theta$ in each right triangle:

a)



$$\tan \theta = \frac{5}{13}$$

b)



$$\tan \theta = \frac{9}{3} = 3$$

2. Use your calculator to determine each tan ratio to 4 decimal places:

a) $\tan 25^\circ = 0.4663$

b) $\tan 72.8^\circ = 3.2305$

3. Use your calculator to determine the value θ to the nearest tenth:

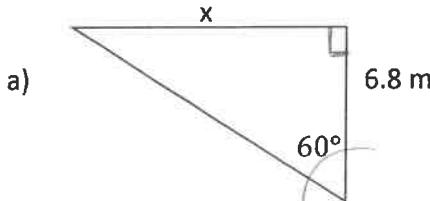
a) $\tan \theta = 0.3157$
 $\theta = \tan^{-1}(0.3157)$

$\theta = 17.5^\circ$

b) $\tan \theta = \frac{5}{2}$

$\theta = 68.2^\circ$

4. Determine the designated side length or angle to the nearest tenth:

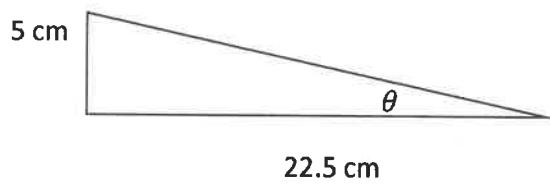


$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$6.8 \cdot \tan 60^\circ = \frac{x}{6.8} \cdot 6.8$$

$$11.8m = x$$

b)

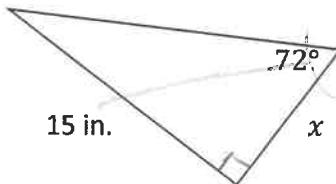


$$\tan \theta = \frac{5}{22.5}$$

$$\angle \theta = \tan^{-1}(5 \div 22.5)$$

$$= 12.5^\circ$$

c)



$$x \cdot \tan 72^\circ = \frac{15}{x} \cdot x$$

$$\frac{x \tan 72}{\tan 72} = \frac{15}{\tan 72}$$

$$x = 4.9 \text{ in}$$

Quiz tomorrow will include a word problem.