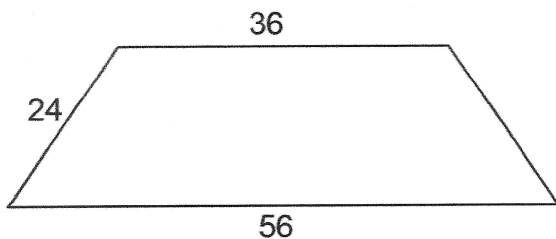


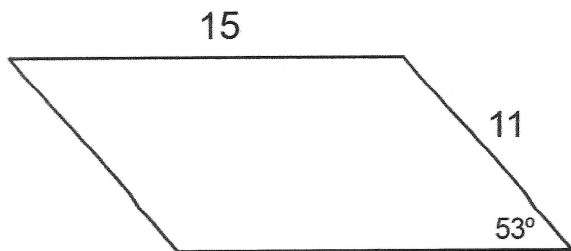
# Bellwork Geo Thursday, March 26, 2020

1. You are high up in a tree hiding from the police. You see a police officer on the ground with an angle of depression of  $23^\circ$ . If you are 40 feet off of the ground find the distance the officer is from the base of the tree you are in. Round to the nearest hundredth.

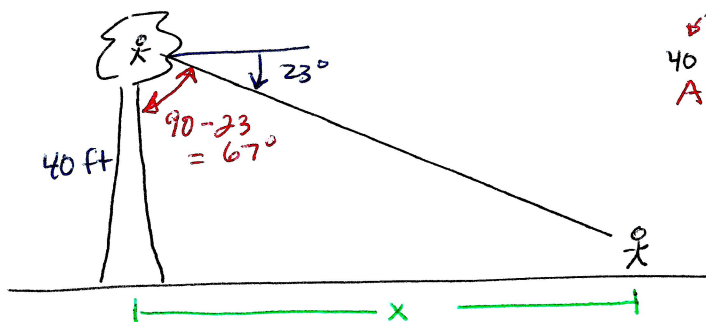
2. Find the area of this Isosceles Trapezoid.



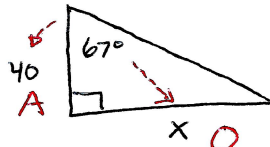
3. Find the area of this Parallelogram.



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SOHCAHTOA



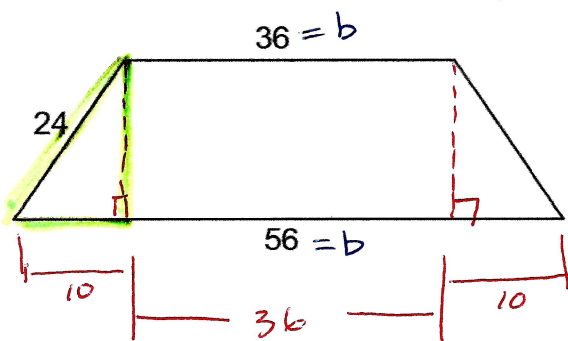
$$40 \cdot \tan 67^\circ = \frac{x}{40} \cdot 40$$

$$x = 40 \cdot \tan 67$$

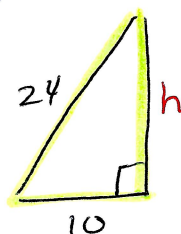
$$x \approx 94.23$$

$$x = 94.23 \text{ ft}$$

2. Find the area of this Isosceles Trapezoid.



$$A = \frac{1}{2} (36 + 56) h = \frac{1}{2} (36 + 56) (21.82)$$



$$h^2 + 10^2 = 24^2$$

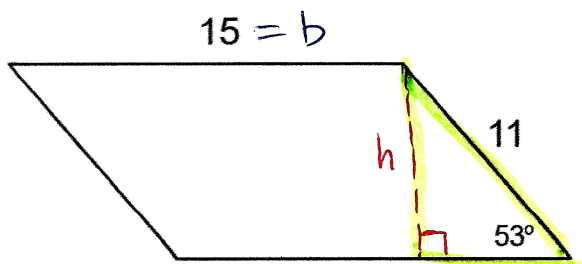
$$h^2 = 24^2 - 10^2$$

$$h = \sqrt{24^2 - 10^2}$$

$$h = 21.82$$

$$A = 1003.72$$

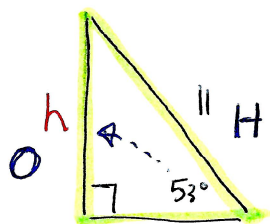
3. Find the area of this Parallelogram.



$$A = (15)h$$

$$A = (15)(8.78)$$

$$A = 131.7$$



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$$\sin 53^\circ = \frac{h}{11}$$

$$h = 11 \cdot \sin 53^\circ = 8.78$$