

NAME _____

DATE _____

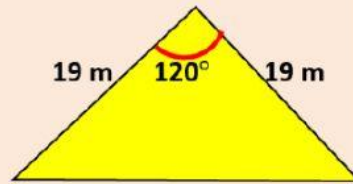
Area of Triangles using Trig. (sine) Activity

$$\text{Area} = \frac{1}{2} ab \sin C$$

$$\text{Area} = \frac{1}{2} \times 19 \times 19 \times \sin 120^\circ$$

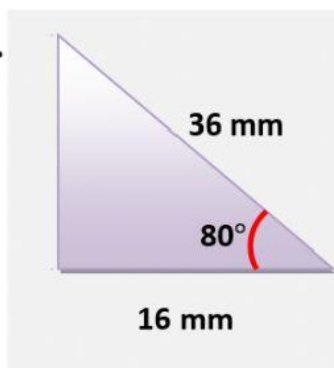
$$\text{Area} = 0.5 \times 361 \times 0.866$$

$$= \mathbf{156.313 \text{ m}^2}$$



Calculate the area of the triangles using $A = \frac{1}{2} ab \sin C$ given to 2 decimal places.

1.



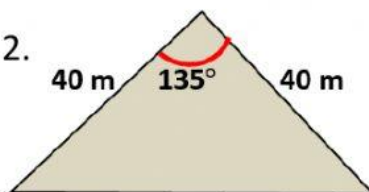
$$\text{Area} = \frac{1}{2} ab \sin C$$

$$\text{Area} = \frac{1}{2} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \sin \underline{\hspace{1cm}}^\circ$$

$$\text{Area} = \frac{1}{2} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$$

$$= \underline{\hspace{1cm}} \text{ mm}^2$$

2.



$$\text{Area} = \frac{1}{2} ab \sin C$$

$$\text{Area} = 0.5 \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \sin \underline{\hspace{1cm}}^\circ$$

$$\text{Area} = \frac{1}{2} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$$

$$= \underline{\hspace{1cm}} \text{ m}^2$$