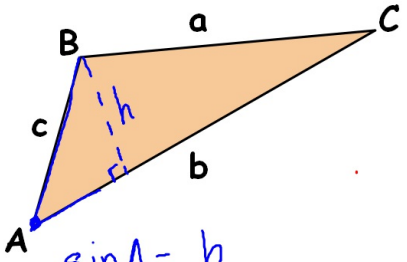
10-5 Area of a Triangle formula



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

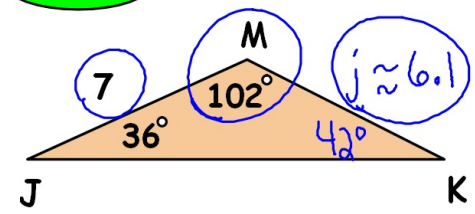
$\sin A = \frac{h}{c}$

$c \sin A = h$

$\text{Area} = \frac{1}{2} b c \sin A$

$= \frac{1}{2}(\text{side}_1 \cdot \text{side}_2 \cdot \sin \text{included} \angle)$

ex. Find area of ΔJKM



$\frac{\sin 42^\circ}{7} = \frac{\sin 36^\circ}{j}$

$\text{Area} = \frac{1}{2}(7)(6.1) \sin 102^\circ$

$\approx 20.9 \text{ units}^2$