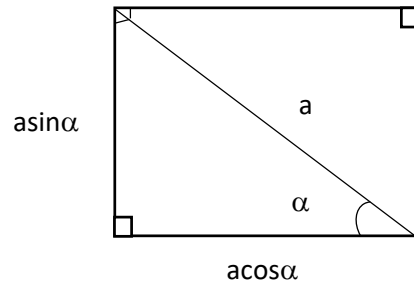


## Trigo area .2



Find the area of triangle

$$S = (\text{asin}\alpha)(\text{acos}\alpha)$$

$$S = \frac{a^2}{2} 2\sin\alpha \cdot \cos\alpha$$

$$S = \frac{a^2}{2} \sin 2\alpha$$

Calculate the area when:

$$\alpha = 30^\circ$$

$$\alpha = 45^\circ$$

$$\alpha = 60^\circ$$

$$\alpha = 15^\circ$$

Data:

	$30^\circ$	$45^\circ$	$60^\circ$
$\sin\alpha$	$1/2$	$\sqrt{2}/2$	$\sqrt{3}/2$
$\cos\alpha$	$\sqrt{3}/2$	$\sqrt{2}/2$	$1/2$

$$\sin 90^\circ = 1$$

$$\sin 120^\circ = \sin 60^\circ$$