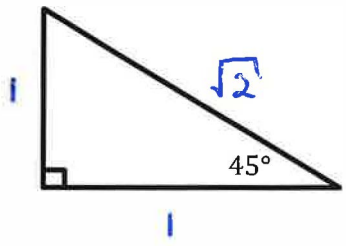
**Name:** KEY

## Section 6.1c – Special Angles

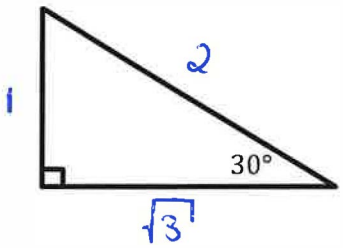
Solve for the missing information

**Solve for the Sine, Cosine, and Tangent Ratios exactly.**




$\sin 45 = \frac{1}{\sqrt{2}}$

$\cos 45 = \frac{1}{\sqrt{2}}$




$\cos 30 = \frac{\sqrt{3}}{2}$

$\sin 30 = \frac{1}{2}$

$\tan 30 = \frac{1}{\sqrt{3}}$

**Evaluate the following ratios for $\theta = 60°$**

$\sin\theta$

$\sin 60 = \frac{\sqrt{3}}{2}$

$\cos\theta$

$\cos 60 = \frac{1}{2}$

$\tan\theta + \sin\theta$ $\boxed{\frac{3\sqrt{3}}{2}}$

$\tan 60 + \sin 60$

$2 \cdot \frac{\sqrt{3}}{1} + \frac{\sqrt{3}}{2} \rightarrow \frac{2\sqrt{3}}{2} + \frac{\sqrt{3}}{2}$

$\cos\frac{\theta}{2} - \sin\frac{\theta}{2}$

$\cos\frac{60}{2} - \sin\frac{60}{2} \rightarrow \cos 30 - \sin 30$

$\frac{\sqrt{3}}{2} - \frac{1}{2} \rightarrow \boxed{\frac{\sqrt{3}-1}{2}}$