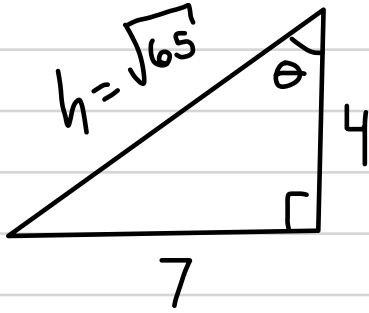


Basic Trigonometry II

①



Find $\sin\theta$, $\cos\theta$, $\tan\theta$

SohCahToa

$$\sin\theta = \frac{7}{\sqrt{65}} \cdot \frac{\sqrt{65}}{\sqrt{65}} = \frac{7\sqrt{65}}{65}$$

$$\cos\theta = \frac{4}{\sqrt{65}} \cdot \frac{\sqrt{65}}{\sqrt{65}} = \frac{4\sqrt{65}}{65}$$

$$\tan\theta = \frac{7}{4}$$

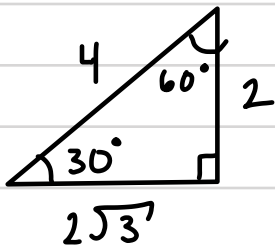
$$h^2 = 7^2 + 4^2$$

$$h^2 = 49 + 16$$

$$h^2 = 65$$

$$h = \sqrt{65}$$

② Find $\sin 30^\circ$, $\cos 30^\circ$, $\tan 30^\circ$, $\sin 60^\circ$, $\cos 60^\circ$, $\tan 60^\circ$



SohCahToa

$$\sin 30^\circ = \frac{2}{4} = \boxed{\frac{1}{2}}$$

$$\cos 30^\circ = \frac{2\sqrt{3}}{4} = \boxed{\frac{\sqrt{3}}{2}}$$

$$\tan 30^\circ = \frac{2}{2\sqrt{3}} = \frac{1}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \boxed{\frac{\sqrt{3}}{3}}$$

$$\sin 60^\circ = \frac{2\sqrt{3}}{4} = \boxed{\frac{\sqrt{3}}{2}}$$

$$\cos 60^\circ = \boxed{\frac{1}{2}}$$

$$\tan 60^\circ = \frac{2\sqrt{3}}{2} = \boxed{\sqrt{3}}$$