

Ex. Evaluate each of the following. Answers must be exact. No calculators permitted.

$$\sin 120^\circ \quad \underline{\hspace{1cm}} \quad \cos 180^\circ \quad \underline{\hspace{1cm}} \quad \tan 30^\circ \quad \underline{\hspace{1cm}} \quad \sin 315^\circ \quad \underline{\hspace{1cm}}$$

$$\cos 210^\circ \quad \underline{\hspace{1cm}} \quad \tan 300^\circ \quad \underline{\hspace{1cm}} \quad \sin 270^\circ \quad \underline{\hspace{1cm}} \quad \cos 60^\circ \quad \underline{\hspace{1cm}}$$

$$\sin 240^\circ \quad \underline{\hspace{1cm}} \quad \tan 225^\circ \quad \underline{\hspace{1cm}} \quad \tan 0^\circ \quad \underline{\hspace{1cm}} \quad \cos 135^\circ \quad \underline{\hspace{1cm}}$$

$$\sin 150^\circ \quad \underline{\hspace{1cm}} \quad \sin 300^\circ \quad \underline{\hspace{1cm}} \quad \cos 330^\circ \quad \underline{\hspace{1cm}} \quad \tan 150^\circ \quad \underline{\hspace{1cm}}$$

Ex. Solve each of the following, where  $0 \leq \theta < 360^\circ$ .

a)  $\sin \theta = \frac{\sqrt{3}}{2}$        $\theta = \underline{\hspace{1cm}}$  or  $\theta = \underline{\hspace{1cm}}$ .

b)  $\cos \theta = \frac{\sqrt{2}}{2}$        $\theta = \underline{\hspace{1cm}}$  or  $\theta = \underline{\hspace{1cm}}$ .

c)  $\sin \theta = \frac{-1}{2}$        $\theta = \underline{\hspace{1cm}}$  or  $\theta = \underline{\hspace{1cm}}$ .

d)  $\tan \theta = \sqrt{3}$        $\theta = \underline{\hspace{1cm}}$  or  $\theta = \underline{\hspace{1cm}}$ .

e)  $\cos \theta = 0$        $\theta = \underline{\hspace{1cm}}$  or  $\theta = \underline{\hspace{1cm}}$ .

f)  $\cos \theta = \frac{-\sqrt{3}}{2}$        $\theta = \underline{\hspace{1cm}}$  or  $\theta = \underline{\hspace{1cm}}$ .

g)  $\tan \theta = -1$        $\theta = \underline{\hspace{1cm}}$  or  $\theta = \underline{\hspace{1cm}}$ .

h)  $\sin \theta = -1$        $\theta = \underline{\hspace{1cm}}$  or  $\theta = \underline{\hspace{1cm}}$ .

