

Solve:

$$1) \sin 120^\circ \cos 150^\circ + \cos 120^\circ \sin 150^\circ =$$

$$2) \sin 330^\circ - \cos 240^\circ + \tan 120^\circ =$$

Solve for  $\theta = 0^\circ \leq \theta \leq 360^\circ$

$$3) \sin \theta = \frac{1}{2}$$

$$4) \tan \theta = \frac{1}{\sqrt{3}}$$

$$5) \tan \theta = -1$$

$$6) \sin \theta = \frac{\sqrt{2}}{2}$$

$$7) \cot \theta = -\sqrt{3}$$

Express as a function of a positive acute angle less than  $45^\circ$ .

8)  $\sin 196^\circ =$

9)  $\cos 147^\circ =$

10)  $\sin 319^\circ =$

11)  $\cos 254^\circ =$

12)  $\tan 294^\circ =$

13)  $\cos 728^\circ =$

14)  $\sin(-625^\circ) =$

15)  $\cos(-435^\circ) =$

**Answer Key**

- 1)  $-1$
- 2)  $-\frac{1}{4}$
- 3)  $30^\circ, 150^\circ$
- 4)  $30^\circ, 210^\circ$
- 5)  $135^\circ, 315^\circ$
- 6)  $45^\circ, 135^\circ$
- 7)  $150^\circ, 330^\circ$
- 8)  $-\sin 16^\circ$
- 9)  $-\cos 33^\circ$
- 10)  $-\sin 41^\circ$
- 11)  $-\sin 16^\circ$
- 12)  $-\cot 24^\circ$
- 13)  $\cos 8^\circ$
- 14)  $\cos 5^\circ$
- 15)  $\sin 15^\circ$