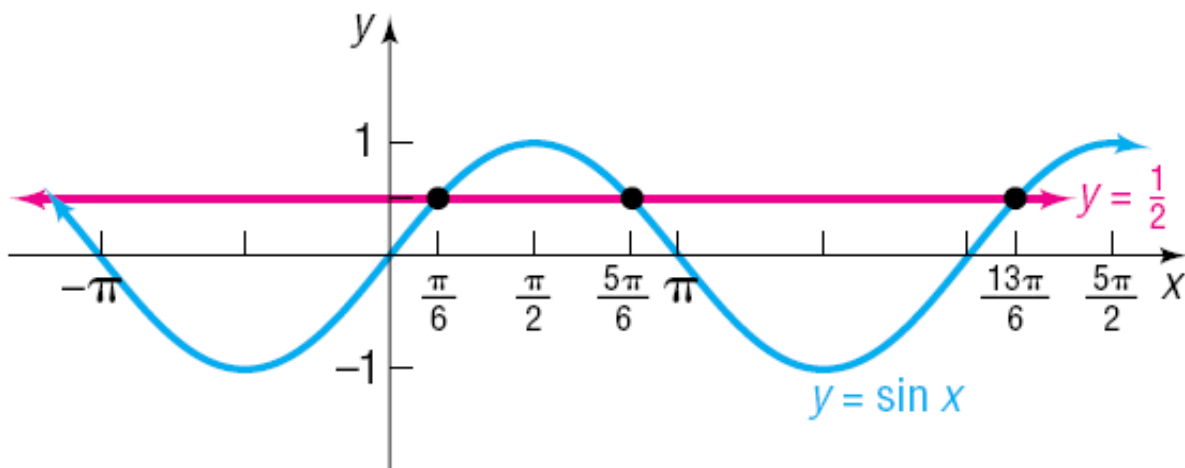


§8.7 Solving Trigonometric Equations (I)

REMEMBER YOU KNOW ALGEBRA !

Example 1 Determine if $\theta = \frac{\pi}{4}$ is a solution of
the equation $\sin \theta = \frac{1}{2}$. Is $\theta = \frac{\pi}{6}$ a solution ?



Example 2 Solve the equation: $\cos \theta = \frac{1}{2}$

Give a general formula for ALL the solutions.
List 8 of the solutions.

Example 3 Solve the equation: $2 \sin \theta + \sqrt{3} = 0$,
 $0 \leq \theta < 2\pi$

Example 4 Solve the equation: $\sin(2\theta) = \frac{1}{2}$,
 $0 \leq \theta < 2\pi$

Example 5 Solve the equation: $\tan\left(\theta - \frac{\pi}{2}\right) = 1$,
 $0 \leq \theta < 2\pi$