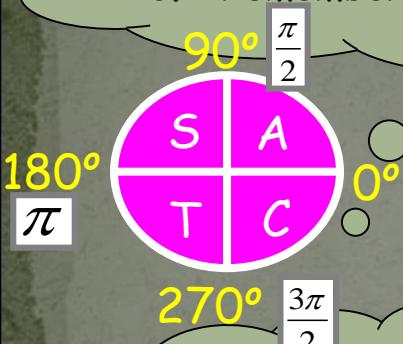
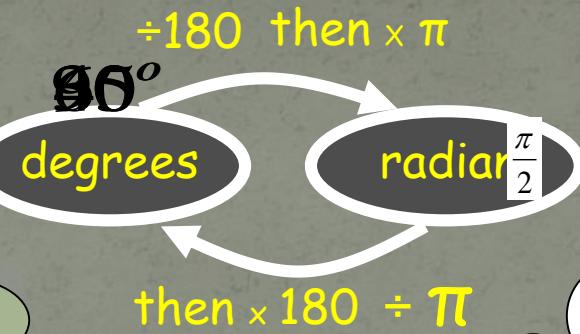


1. Rearrange into $\sin =$
2. Find solution in Basic Quads
3. Remember Multiple solutions

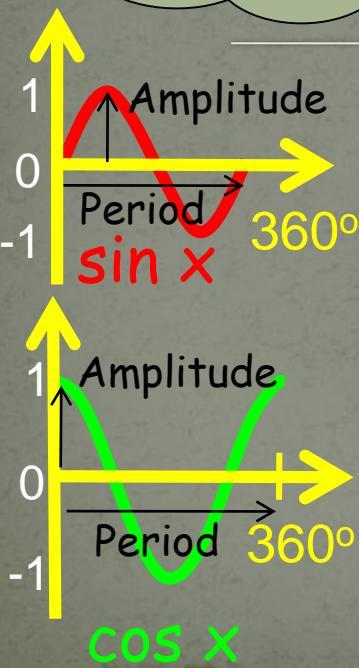


Basic Strategy
for Solving
Trig Equations



Exact Value Table

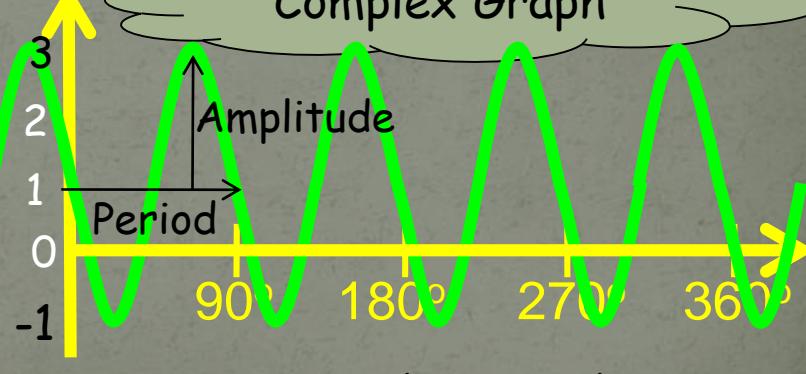
| | sin | cos | tan |
|------------|----------------------|----------------------|----------------------|
| 0° | 0 | 1 | 0 |
| 30° | $\frac{1}{2}$ | $\frac{\sqrt{3}}{2}$ | $\frac{1}{\sqrt{3}}$ |
| 45° | $\frac{1}{\sqrt{2}}$ | $\frac{1}{\sqrt{2}}$ | 1 |
| 60° | $\frac{\sqrt{3}}{2}$ | $\frac{1}{2}$ | $\sqrt{3}$ |
| 90° | 1 | 0 | undefined |



Basic Graphs

Trigonometry \sin, \cos, \tan

Complex Graph



$$y = 2\sin(4x + 45^\circ) + 1$$

$$\text{Max. Value} = 2+1=3 \quad \text{Period} = 360 \div 4 = 90^\circ$$

$$\text{Min. Value} = -2+1=-1 \quad \text{Amplitude} = 2$$