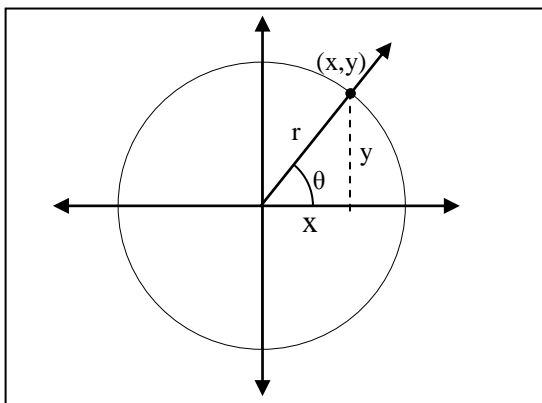
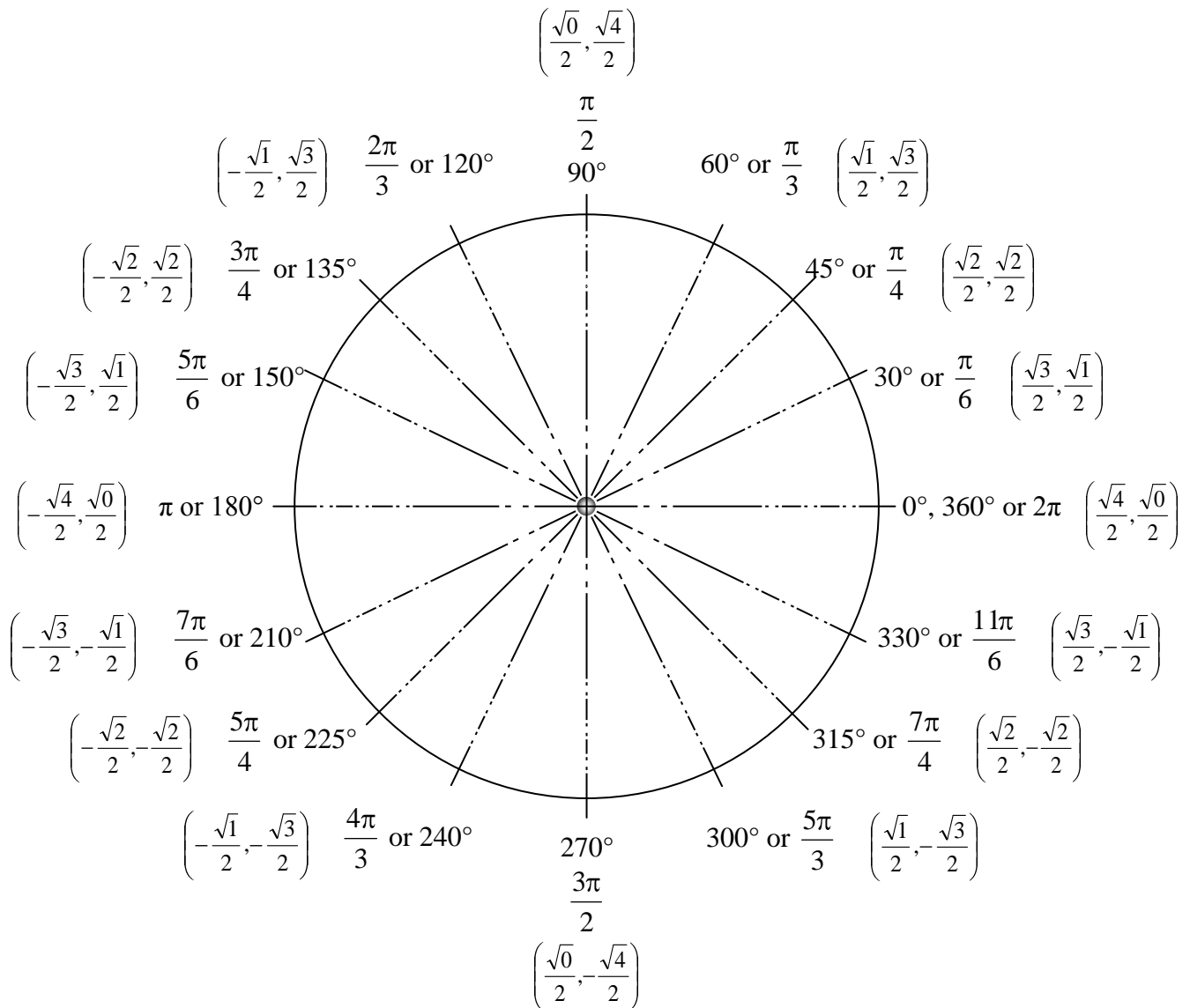


Trigonometry

UNIT CIRCLE



UNIT CIRCLE RATIOS

$$\sin\theta = \frac{y}{r}$$

$$\csc\theta = \frac{r}{y}$$

$$\cos\theta = \frac{x}{r}$$

$$\sec\theta = \frac{r}{x}$$

$$\tan\theta = \frac{y}{x}$$

$$\cot\theta = \frac{x}{y}$$

Trigonometry FUNCTIONS

$\sin A = \frac{\text{opp}}{\text{hyp}}$ $\cos A = \frac{\text{adj}}{\text{hyp}}$ $\tan A = \frac{\text{opp}}{\text{adj}}$	$\csc A = \frac{\text{hyp}}{\text{opp}}$ $\sec A = \frac{\text{hyp}}{\text{adj}}$ $\cot A = \frac{\text{adj}}{\text{opp}}$	<p style="text-align: center;">45° - 45° - 90°</p> <p style="text-align: right;">30° - 60° - 90°</p>
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	Radians:	0 or 2π	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$
	Degrees:	0° or 360°	30°	45°	60°	90°	180°	270°
Functions	sin	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	0	-1
	cos	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	-1	0
	tan	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	Undefined	0	Undefined
	csc	Undefined	2	$\sqrt{2}$	$\frac{2\sqrt{3}}{3}$	1	Undefined	-1
	sec	1	$\frac{2\sqrt{3}}{3}$	$\sqrt{2}$	2	Undefined	-1	Undefined
	cot	Undefined	$\sqrt{3}$	1	$\frac{\sqrt{3}}{3}$	0	Undefined	0