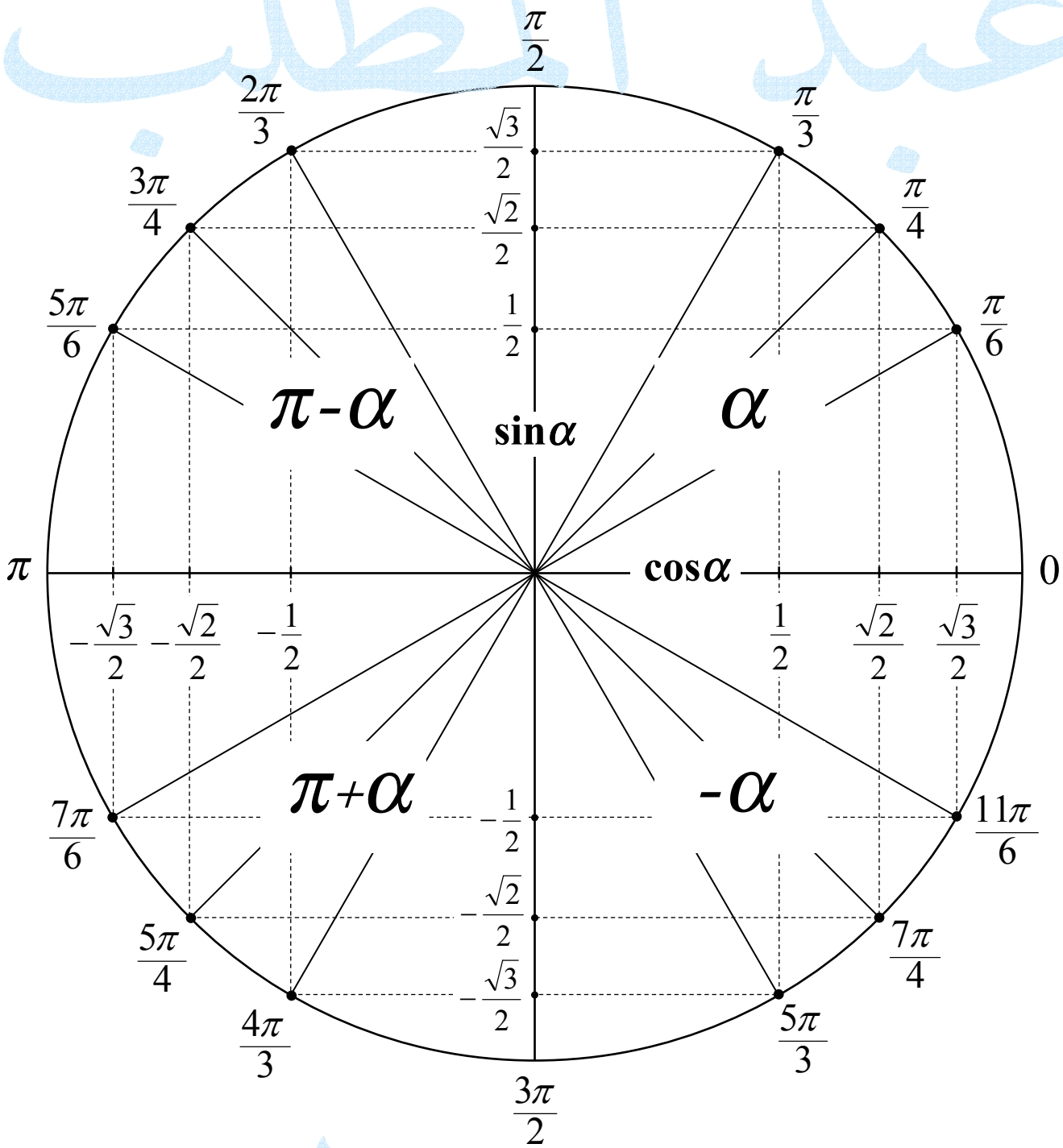
إعداد: عبد المطلب

بوزريعة: محرم 1432هـ

Cercle Trigonométrique



$$\sin^2\alpha+\cos^2\alpha=1$$

$$\cos2\alpha=\cos^2\alpha-\sin^2\alpha=2\cos^2\alpha-1=1-2\sin^2\alpha$$

$$\sin2\alpha=2\sin\alpha\cos\alpha$$

$$2\cos^2\alpha=1+\cos2\alpha$$

$$2\sin^2\alpha=1-\cos2\alpha$$

α	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	π	$\frac{3\pi}{2}$
$\sin\alpha$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	0	-1
$\cos\alpha$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	-1	0
$tg\alpha$	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	∞	0	∞

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