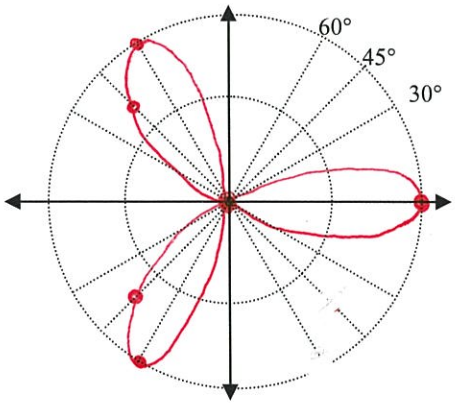
Name: Key

9.2 Graphs of Polar equations

Sketch a polar graph of $r = 2\cos 3\theta$

θ	0°	30°	45°	60°	90°	120°	135°	150°
r	2	0	-1.41	-2	0	2	1.41	0

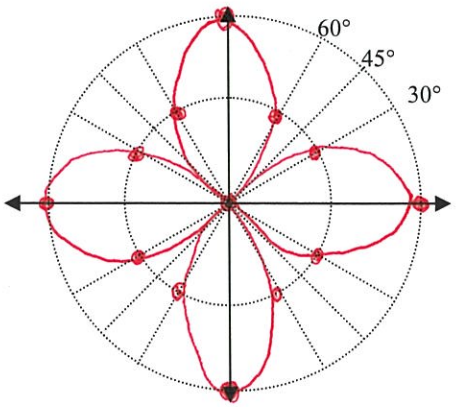
θ	180°	210°	225°	240°	270°	300°	315°	330°
r	-2	0	1.41	2	0	-2	-1.41	0



Name: _____

9.2 Graphs of Polar equations

Sketch a polar graph of $r = 2\cos 2\theta$

θ	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\frac{2\pi}{3}$	$\frac{3\pi}{4}$	$\frac{5\pi}{6}$
r	2	1	0	-1	-2	-1	0	1

θ	π	$\frac{7\pi}{6}$	$\frac{5\pi}{4}$	$\frac{4\pi}{3}$	$\frac{3\pi}{2}$	$\frac{5\pi}{3}$	$\frac{7\pi}{4}$	$\frac{11\pi}{6}$
r	2	1	0	-1	-2	-1	0	+1