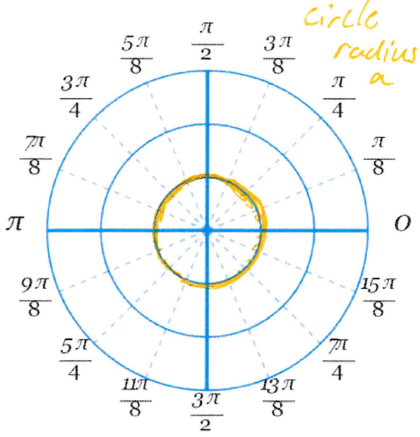
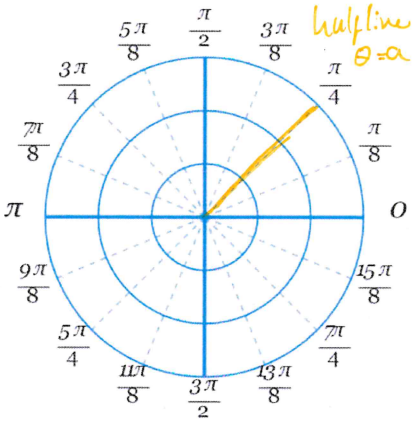
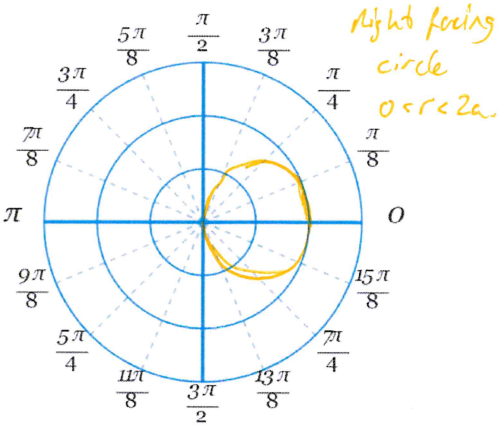
Polar Sketches



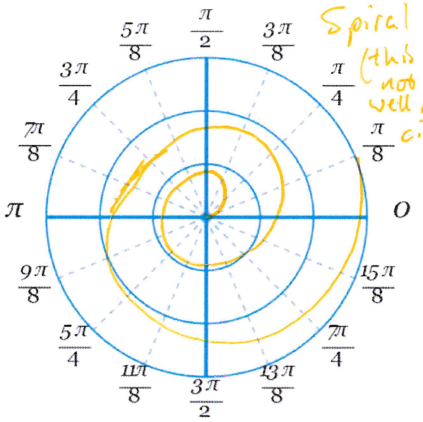
$r = a$



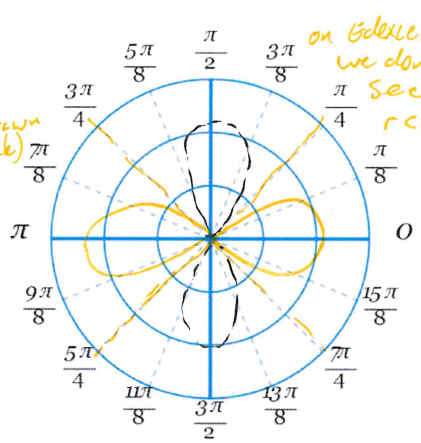
$\theta = a$



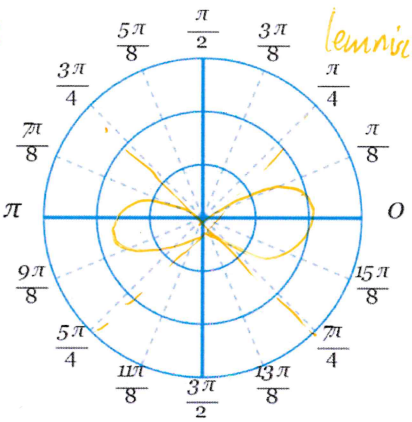
$r = 2a\cos\theta$



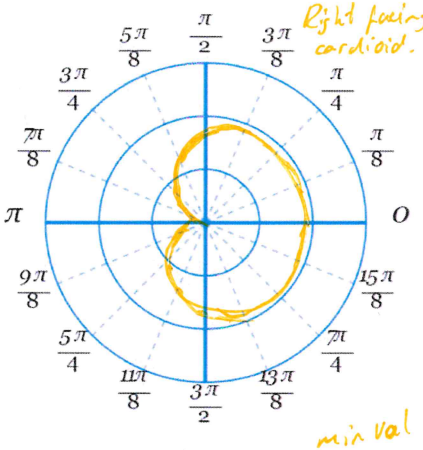
$r = k\theta$



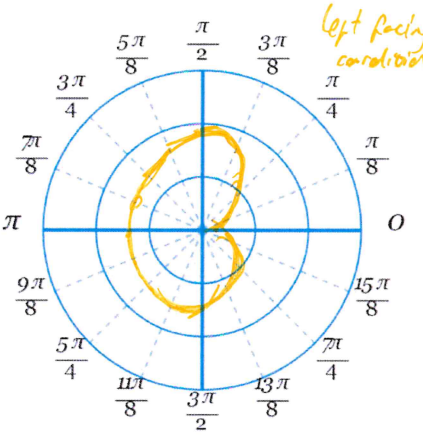
$r = a\cos 2\theta$



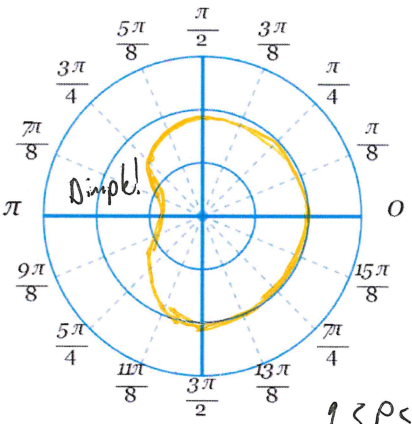
$r^2 = a^2\cos 2\theta$



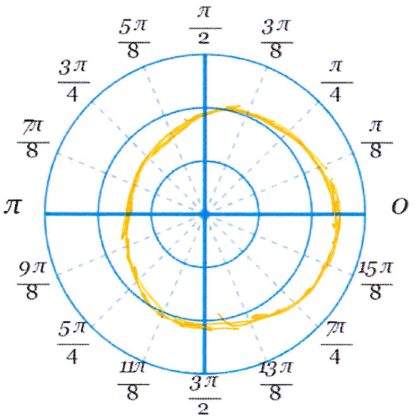
$r = a(1 + \cos\theta)$ min val 0



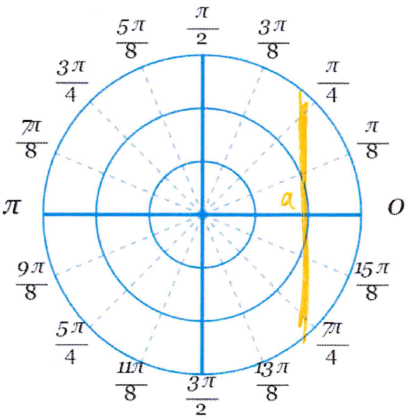
$r = a(1 - \cos\theta)$



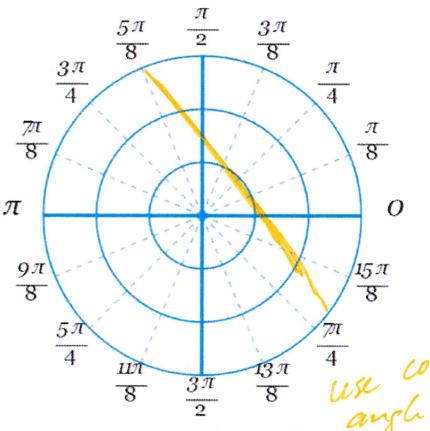
$r = a(3 + 2\cos\theta)$ $1 < \rho < 2$ so dimple.



$r = a(12 + 3\cos\theta)$ $\rho > 2a$ pass



$r = a\sec\theta$ $\Rightarrow r\cos\theta = a$ $x = a$



$r = p\sec(\alpha - \theta)$ use compound angle formula $y = p\cos\alpha - (\cot\alpha)x$