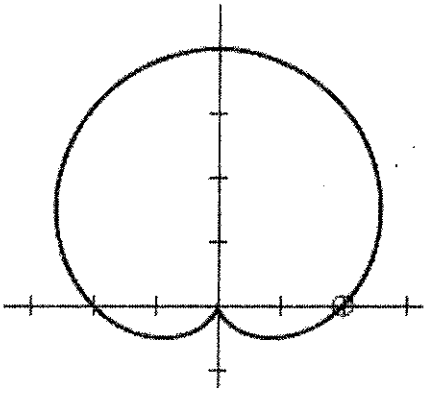
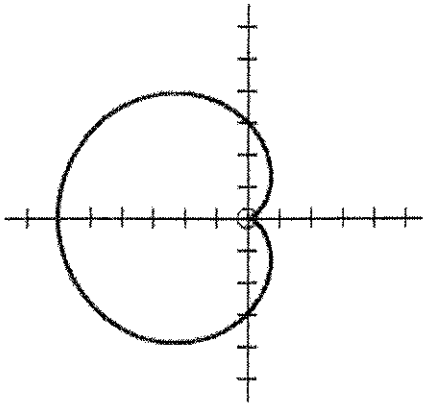
Key

Special Polar Curves

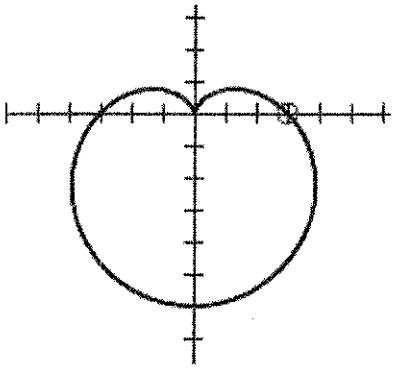
$r = 2+2\sin\theta$ (A)



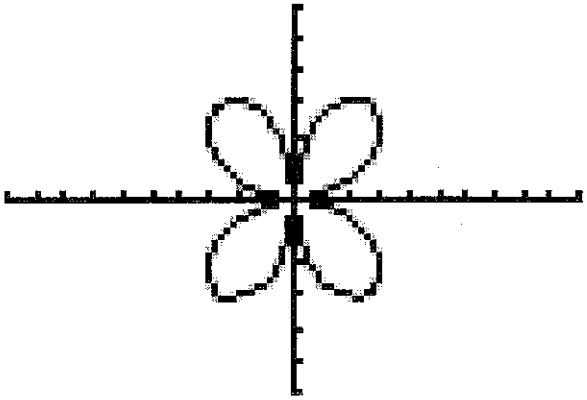
$r = 3-3\cos\theta$ (J)



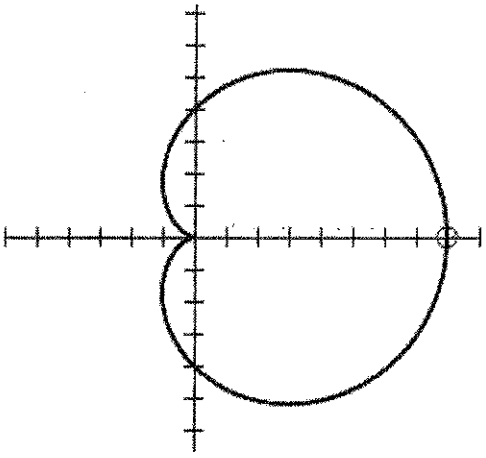
$r = 3-3\sin\theta$ (L)



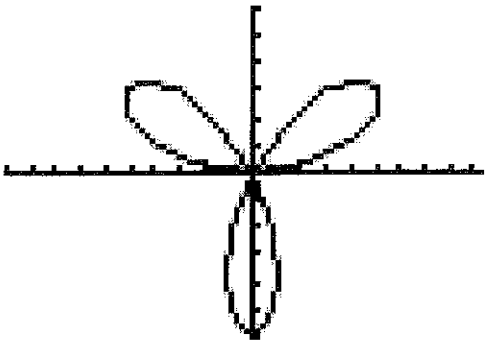
$r = 4\sin(2\theta)$ (K)



$r = 4+4\cos\theta$ (B)

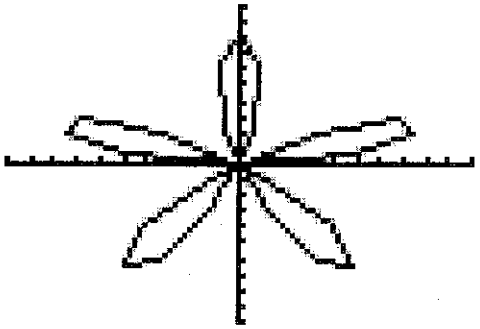


$r = 6\sin(3\theta)$ (E)

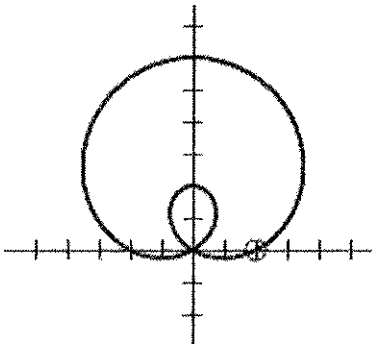


Special Polar Curves

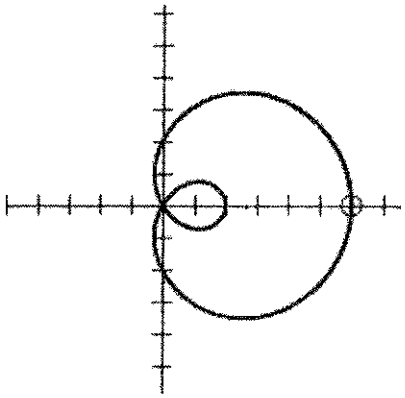
$r = 8\sin(5\theta)$ (F)



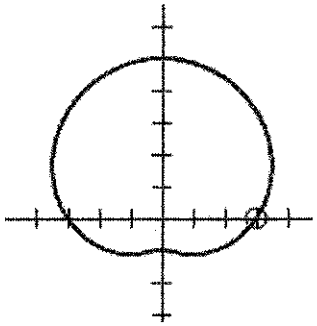
$r = 2+4\sin\theta$ (H)



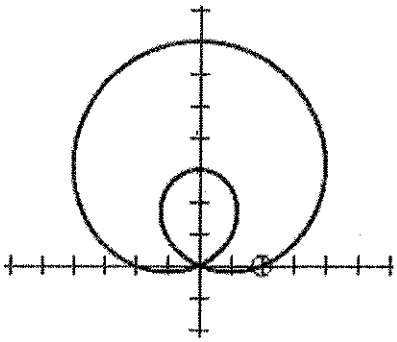
$r = 2+4\cos\theta$ (G)



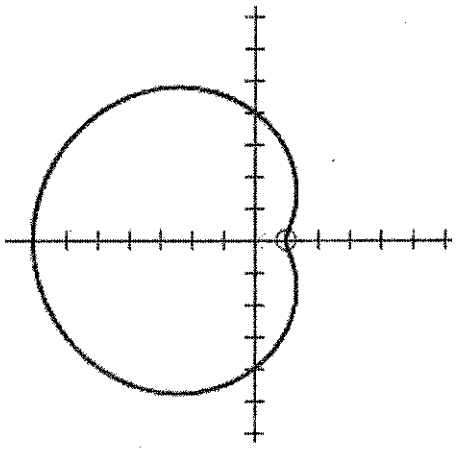
$r = 3+2\sin\theta$ (D)



$r = 2+5\sin\theta$ (C)



$r = 4-3\cos\theta$ (I)



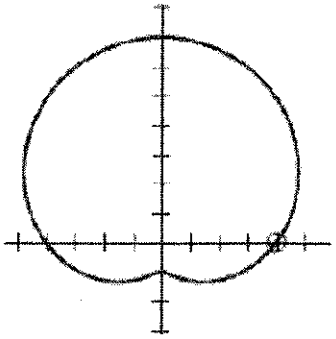
Special Polar Curves

Identify the special curve and any special properties (symmetry, distance from pole, number of leaves)

$r = 4 + 3\sin\theta$

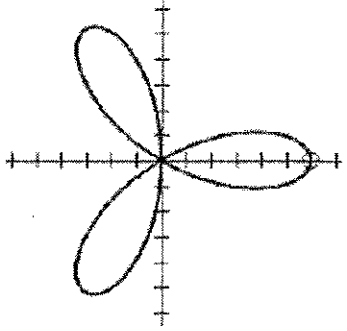
Dimpled Limacon,

symmetric w/ positive y-axis



$r = 6\cos 3\theta$

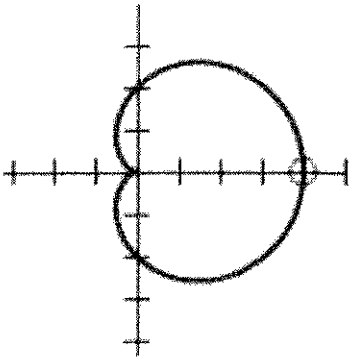
Rose curve with 3 petals that are 6 units long



$r = 2 + 2\cos\theta$

Cardioid that is

Symmetric w/ positive x-axis

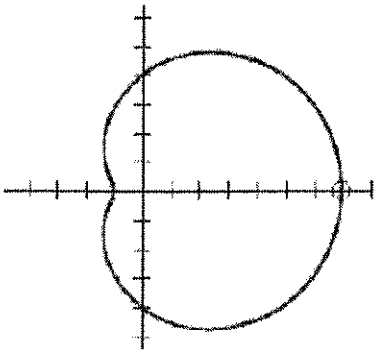


Special Polar Curves

$r = 4 + 3\cos\theta$

Dimpled Limacon,

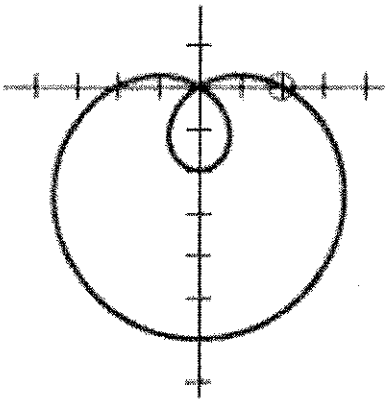
symmetric w/ positive x-axis



$r = 2 - 4\sin\theta$

Limacon with an inner loop

that is symmetric w/ negative y-axis

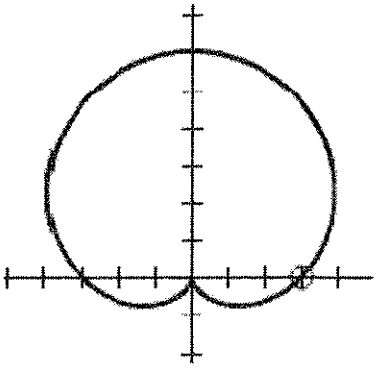


$r = 3 + 3\sin\theta$

Cardioid that is

symmetric with the

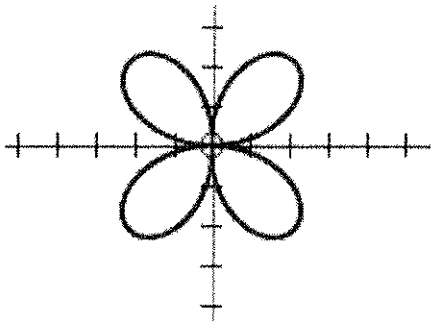
positive y –axis



Special Polar Curves

$r = 3\sin 2\theta$

Rose curve with 4 petals that are 3 units long



$r = 3 + 5\cos\theta$

Limacon with an inner loop that is symmetric with the positive x-axis