6.4 change to 6.4

NAME Key DATE

Practice Worksheet

24/24

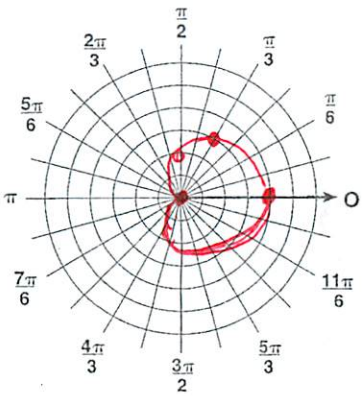
Graphs of Polar Equations

Circles, Lines, Cardioids, Limacons?

Graph each polar equation. Identify the classical curve it represents.

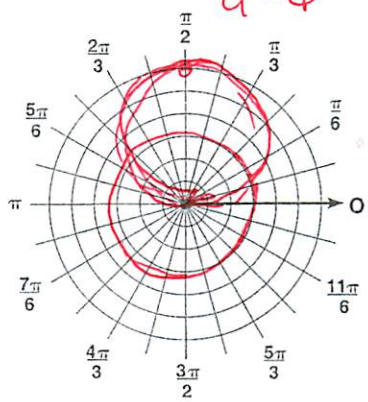
(2 pts each)

1. $r = 2 + 2\cos\theta$ cardiod

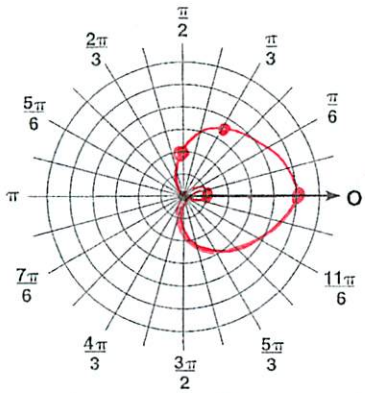


2. $r = 3$ & $r = 6\sin\theta$

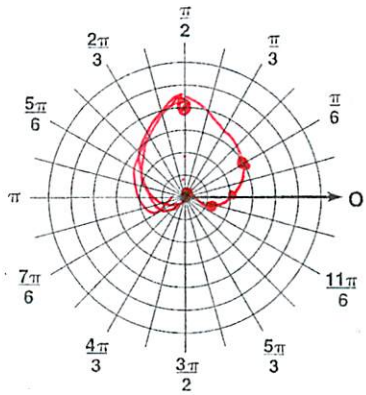
$d = 6$



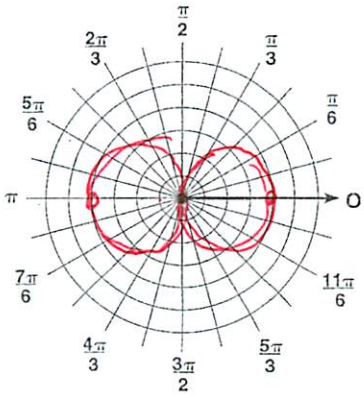
3. $r = 2 + 3\cos\theta$ limacon? loop



4. $r = 2 + 2\sin\theta$ cardioid

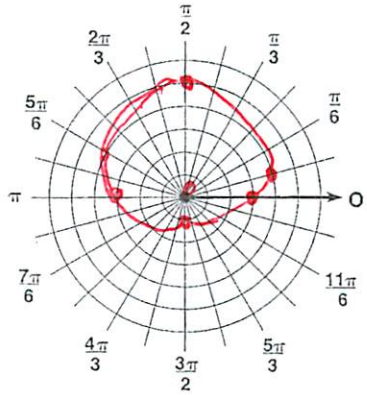


5. $r = 4\cos\theta$ & $r = -4\cos\theta$



6. $r = 3 + 2\sin\theta$ limacon? no loop

pole inside



Glencoe Division, Macmillan/McGraw-Hill

6.4

NAME _____ DATE _____

Practice Worksheet

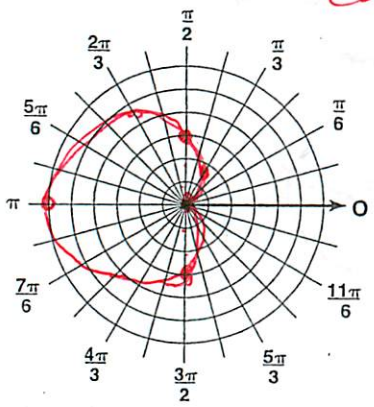
Graphs of Polar Equations

Circles, Lines, Cardioids

Graph each polar equation. Identify the classical curve it represents.

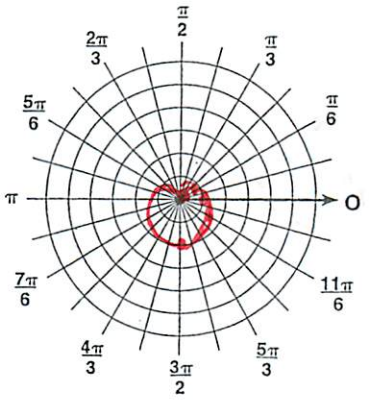
1. $r = 3 - 3\cos\theta$

cardioid

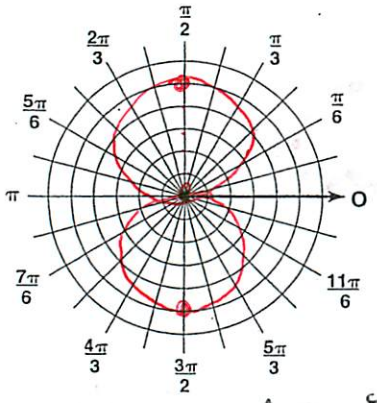


2. $r = 1 - \sin\theta$

cardioid

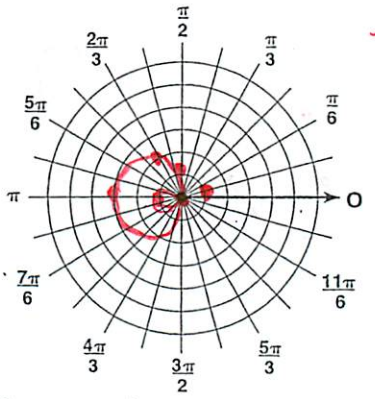


3. $r = 5\sin\theta$ & $r = -5\sin\theta$

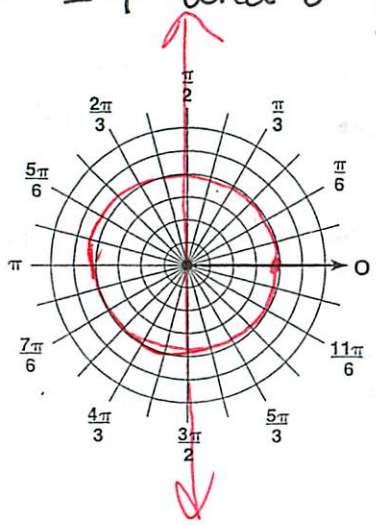


4. $r = 1 - 2\cos\theta$

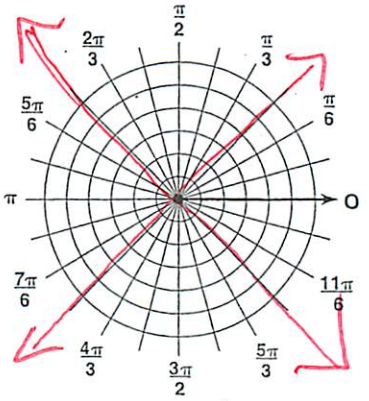
limacon, loop



5. $r = \pm 4$ and $\theta = \frac{\pi}{2}$



6. $\theta = \pi/4$ and $\theta = \frac{-\pi}{4}$



Glencoe Division, Macmillan/McGraw-Hill