zh777fl

Join Classroom:

1st period: Justin
2nd per.: Jessica
6-7 per.: Kelise

Friday 2nd Period
Remember HW Key is online.
GHW#14 is due Friday.
End of Ch 9 Quiz next Monday.

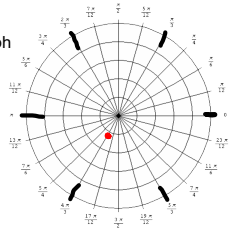
Mar 1-7:54 PM

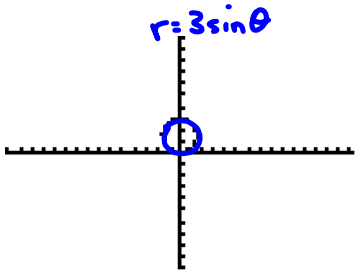
Pg. 638 #10

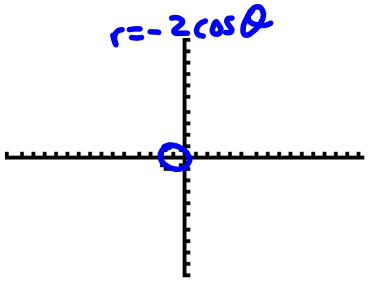
10) $(1.2, \frac{4\pi}{3})(-1.2, \frac{\pi}{3})(-1.2, -\frac{5\pi}{3})$

24) $(1, \frac{3\pi}{2})$

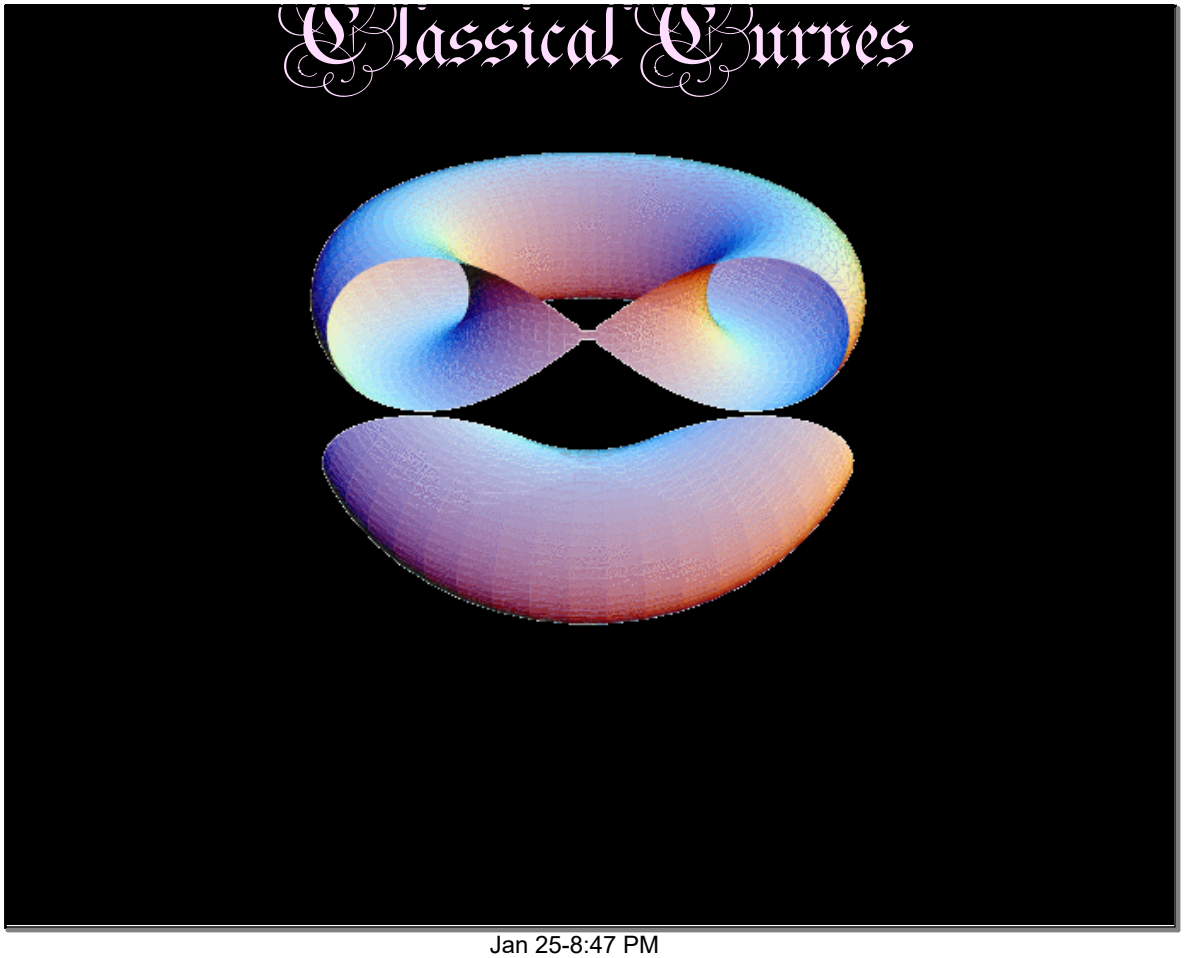
10) Graph







Feb 24-1:48 PM



Jan 25-8:47 PM

Graph and name the following curves:

Archimedes Spiral

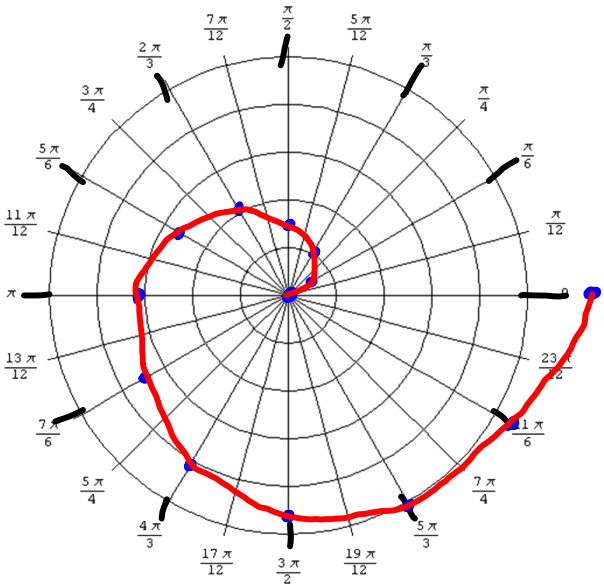
3.14 — 1.57 — 0, 6.28 — 4.71

1. $r = \theta$

θ	0	$\frac{\pi}{6}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\frac{2\pi}{3}$	$\frac{5\pi}{6}$	π	$\frac{7\pi}{6}$	$\frac{4\pi}{3}$	$\frac{3\pi}{2}$	$\frac{5\pi}{3}$	$\frac{11\pi}{6}$	2π
0	0	0	.52	1.05	1.57	2.09	2.62	3.14	3.67	4.19	4.71	5.24	5.76	6.28
$r = f(\theta)$ $r = \theta$														

0 1.57 3.14 4.71 6.28

$r = a\theta$



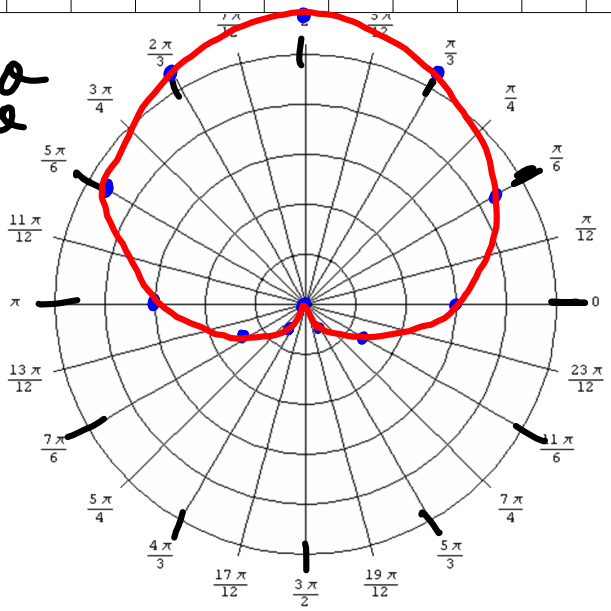
Jan 25-8:53 PM

2. $r = 3 + 3\sin\theta$ Cardioid

θ	0	$\frac{\pi}{6}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\frac{2\pi}{3}$	$\frac{5\pi}{6}$	π	$\frac{7\pi}{6}$	$\frac{4\pi}{3}$	$\frac{3\pi}{2}$	$\frac{5\pi}{3}$	$\frac{11\pi}{6}$	2π
$r = f(\theta)$ $r = 3 + 3\sin\theta$	3	4.5	5.6	6	5.6	4.5	3	1.5	.4	0	.4	1.5	3

$r = a \pm b\sin\theta$ or $\cos\theta$

$a = b$



Jan 25-9:00 PM

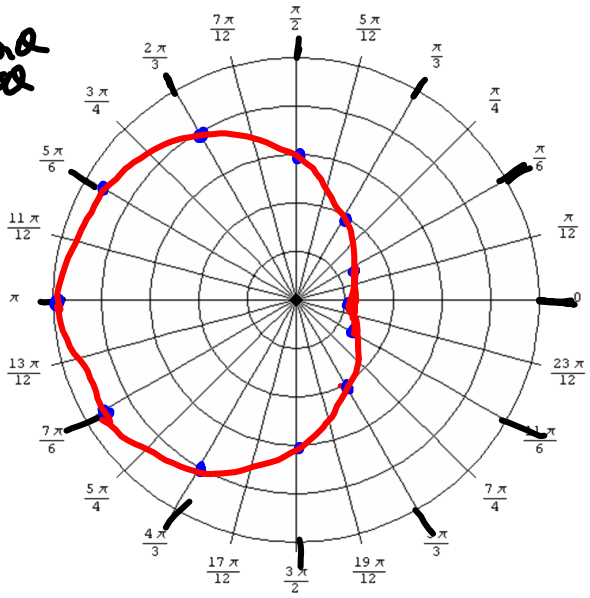
5. $r = 3 - 2\cos\theta$ limaçon (lima bean)

0 1.57 3.14 4.71 6.28

θ	0	$\frac{\pi}{6}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\frac{2\pi}{3}$	$\frac{5\pi}{6}$	π	$\frac{7\pi}{6}$	$\frac{4\pi}{3}$	$\frac{3\pi}{2}$	$\frac{5\pi}{3}$	$\frac{11\pi}{6}$	2π
$r = f(\theta)$ $r = 3 - 2\cos\theta$	1	1.27	2	3	4	4.73	5	4.73	4	3	2	1.27	1

$r = a \pm b\sin\theta$ or $\cos\theta$

$a \neq b$



See $r = 2 - 4\cos\theta$

Jan 25-9:04 PM

3. $r = 2 \sin 2\theta$ rose 0 1.57 3.14 4.71 6.28

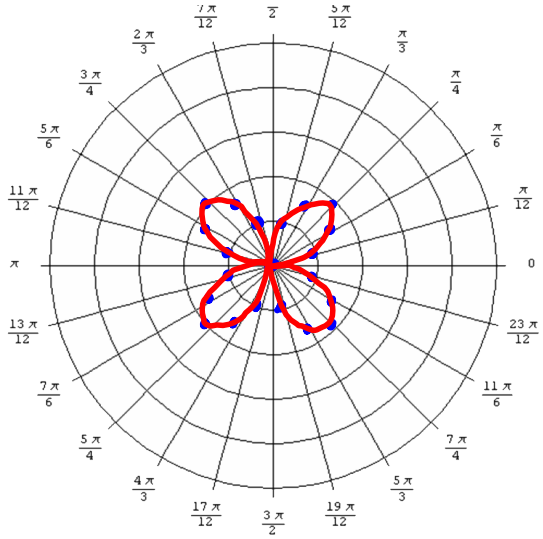
θ	0	$\frac{\pi}{12}$	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{5\pi}{12}$	$\frac{\pi}{2}$	$\frac{7\pi}{12}$	$\frac{2\pi}{3}$	$\frac{3\pi}{4}$	$\frac{5\pi}{6}$	$\frac{11\pi}{12}$	π
$r = f(\theta)$ $r = 2\sin 2\theta$	0	1	1.73	2	1.73	1	0	-1	-1.73	-2	-1.73	-1	0

θ	$\frac{13\pi}{12}$	$\frac{7\pi}{6}$	$\frac{5\pi}{4}$	$\frac{4\pi}{3}$	$\frac{17\pi}{12}$	$\frac{3\pi}{2}$	$\frac{19\pi}{12}$	$\frac{5\pi}{3}$	$\frac{7\pi}{4}$	$\frac{11\pi}{6}$	$\frac{23\pi}{12}$	2π
$r = f(\theta)$ $r = 2\sin 2\theta$	1	1.73	2	1.73	1	0	-1	-1.73	-2	-1.73	-1	0

$r = a \sin n\theta$ (or $\cos n\theta$)

If n is even, $2n$ petals

If n is odd, n petals.



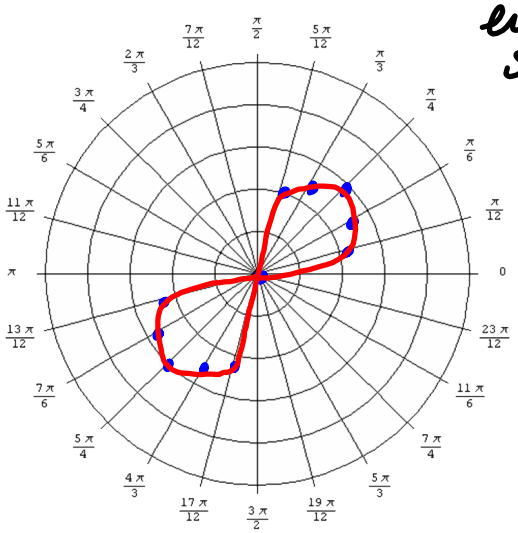
Jan 25-9:01 PM

4. $r^2 = 9 \sin 2\theta$ $r = \pm\sqrt{9\sin 2\theta}$ lemniscate (caligue 8)

θ	0	$\frac{\pi}{12}$	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{5\pi}{12}$	$\frac{\pi}{2}$	$\frac{7\pi}{12}$	$\frac{2\pi}{3}$	$\frac{3\pi}{4}$	$\frac{5\pi}{6}$	$\frac{11\pi}{12}$	π
$r = f(\theta)$ $r^2 = 9\sin 2\theta$	0	± 2.1	± 2.6	± 3	± 2.6	± 2.1	0	–	–	–	–	–	0

θ	$\frac{13\pi}{12}$	$\frac{7\pi}{6}$	$\frac{5\pi}{4}$	$\frac{4\pi}{3}$	$\frac{17\pi}{12}$	$\frac{3\pi}{2}$	$\frac{19\pi}{12}$	$\frac{5\pi}{3}$	$\frac{7\pi}{4}$	$\frac{11\pi}{6}$	$\frac{23\pi}{12}$	2π
$r = f(\theta)$ $r^2 = 9\sin 2\theta$	± 2.1	± 2.6	± 3	± 2.6	± 2.1	0	–	–	–	–	–	0

$r^2 = a \sin 2\theta$ (or $\cos 2\theta$)



error or scientific notation ...

$r = \pm\sqrt{9\sin 4\pi}$

$\pm\sqrt{9.0}$

$\pm\sqrt{0}$

$= 0$

Jan 25-9:02 PM

Cool Graph of the Day

$r = 3\sin(3\theta/4)$

[0, 8π], .1
[−4, 4], 0
[−3, 3], 0

Jan 30-12:15 PM

Feb 27-8:00 PM