

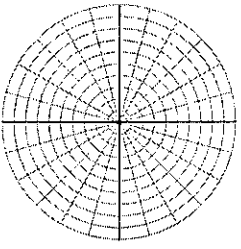
CALCULUS 2

Name: \_\_\_\_\_

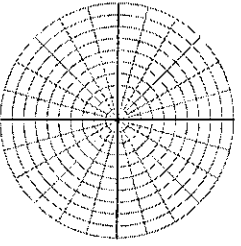
WORKSHEET 13.2-2

Graph:

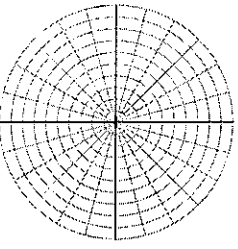
1.  $r = 3 + 3 \cos \theta$



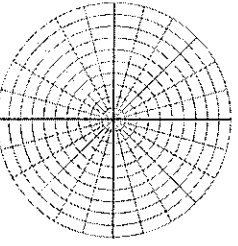
2.  $r = 4 - 4 \sin \theta$



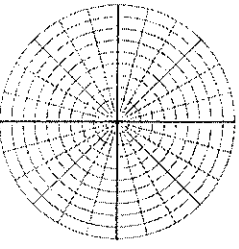
3.  $r = 4 + 6 \cos \theta$



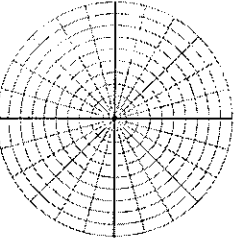
4.  $r = 7 - 2 \sin \theta$



5.  $r = 5 - 3 \cos \theta$



6.  $r = 3 + 4 \sin \theta$

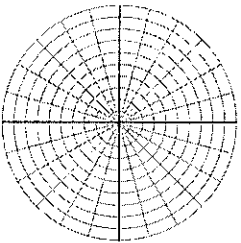


CALCULUS 2

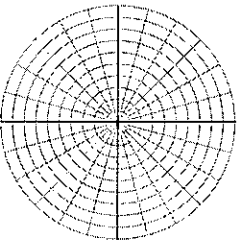
Name: \_\_\_\_\_

WORKSHEET 13.3-1

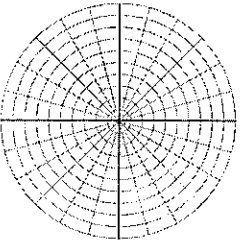
1.  $r = 8 + \sin \theta$



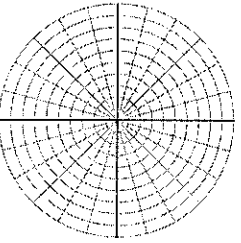
2.  $r = 5 + 5 \cos \theta$



3.  $r = 6 \sin 4\theta$



4.  $r = 8 \cos 3\theta$



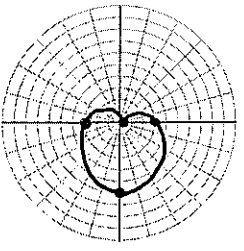
CALCULUS 2

WORKSHEET 13.2-2

Name: \_\_\_\_\_

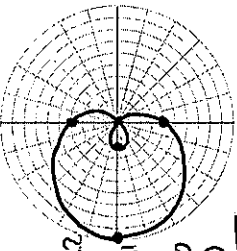
Graph:

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



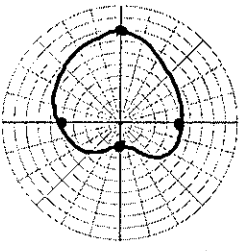
$\theta$	$r$
0	6
$\frac{1}{2}\pi$	3
$\pi$	0
$\frac{3}{2}\pi$	3

3.  $r = 4 + 6 \cos \theta$



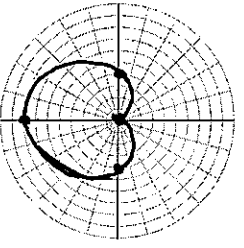
$\theta$	$r$
0	10
$90^\circ$	4
$180^\circ$	-2
$270^\circ$	4

5.  $r = 5 - 3 \cos \theta$



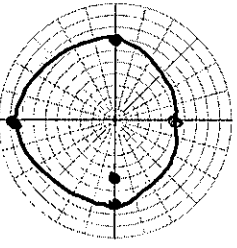
$\theta$	$r$
0	2
$90^\circ$	5
$180^\circ$	8
$270^\circ$	5

2.  $r = 4 - 4 \sin \theta$



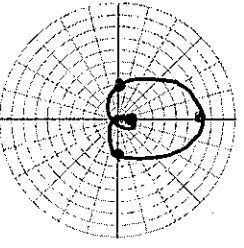
$\theta$	$r$
0	4
$\frac{1}{2}\pi$	0
$\pi$	4
$\frac{3}{2}\pi$	8

4.  $r = 7 - 2 \sin \theta$



$\theta$	$r$
0	7
$90^\circ$	5
$180^\circ$	7
$270^\circ$	9

6.  $r = 3 + 4 \sin \theta$



$\theta$	$r$
0	3
$90^\circ$	7
$180^\circ$	3
$270^\circ$	-1

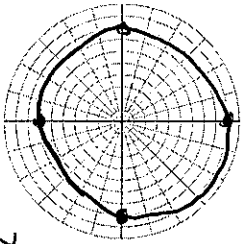
CALCULUS 2

WORKSHEET 13.3-1

Name: \_\_\_\_\_

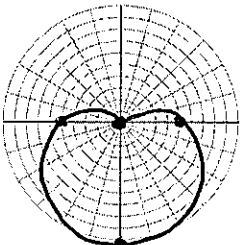
Key

1.  $r = 8 + \sin \theta$



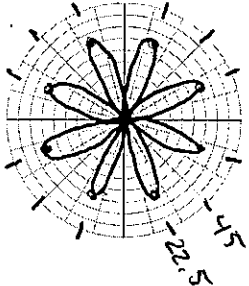
$\theta$	$r$
0	8
$90^\circ$	9
$180^\circ$	8
$270^\circ$	7

2.  $r = 5 + 5 \cos \theta$



$\theta$	$r$
0	10
$90^\circ$	5
$180^\circ$	0
$270^\circ$	5

3.  $r = 6 \sin 4\theta$



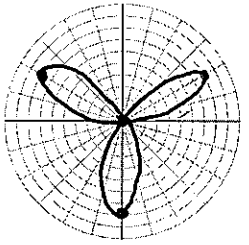
8 petals

$l = \sin 90 = \sin 4 (2 \cdot 5)$

length = 6

$45^\circ$  apart

4.  $r = 8 \cos 3\theta$



3 petals

$l = \cos 0 =$

length = 8

$120^\circ$  apart