

HOMEWORK ON POLARS DAY 2

NAME _____

Identify the polar graph (*circle, cardioid, limacon, lemniscate, or rose*):

If a circle, name the center (in polar coordinates) and the radius.

If a limacon, name the type.

If a rose, state the number of petals.

If a lemniscate, identify the length of each petal.

1. $r = 4\cos\theta$

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

2. $r = 5 - 2\sin\theta$

7. $r = 8\cos 5\theta$

3. $r = -7\sin 10\theta$

8. $r = -8$

4. $r = 4 + 7\sin\theta$

9. $r = 8 + 6\cos\theta$

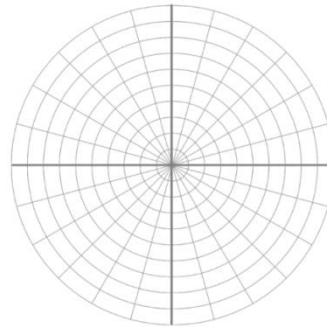
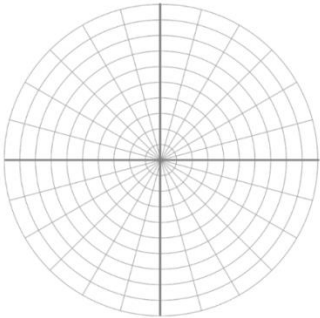
5. $r = -2\sin\theta$

10. $r^2 = 9\cos 2\theta$

Graph:

11. $r = 4 + 4\sin\theta$

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



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

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

