Sketch the graph after identifying the type of graph. Show all work and reasoning involved in sketching the graph. You may check by using a graphing calculator.

1. \( r = 3 \sin \theta \)

2. \( r = -2 \sin 3\theta \)

3. \( r = 3 - 3 \cos \theta \)

4. \( r = 4 + 4 \sin \theta \)

5. \( r = 2 - 4 \cos \theta \)

6. \( r = 4 - 2 \cos \theta \)

7. \( r = 5 - 5 \sin \theta \)

8. \( r = 4 + 3 \cos \theta \)

9. \( r = 3 \sin 4\theta \)

10. \( r^2 = 4 \sin 2\theta \)

11. \( r = 2 + \sin \theta \)

12. \( r^2 = 9 \cos 2\theta \)