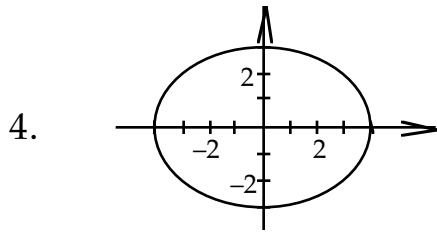


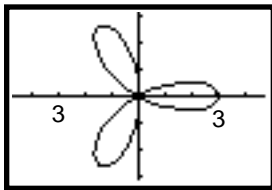
## Problem Set 111

2.  $31\frac{1}{2}$  units



$$\frac{dy}{dx} = -\frac{9x}{16y}$$

6.  $r = 6 \cos \theta$



10.  $\langle 6.016, -3.578 \rangle$

12. 1

14. 1

16.  $e^3$

18.  $\frac{\sqrt{2}}{2}$

20.  $\int_0^\pi \sqrt{1 + \cos^2 x} \, dx$

22. Converges to 0

24. B