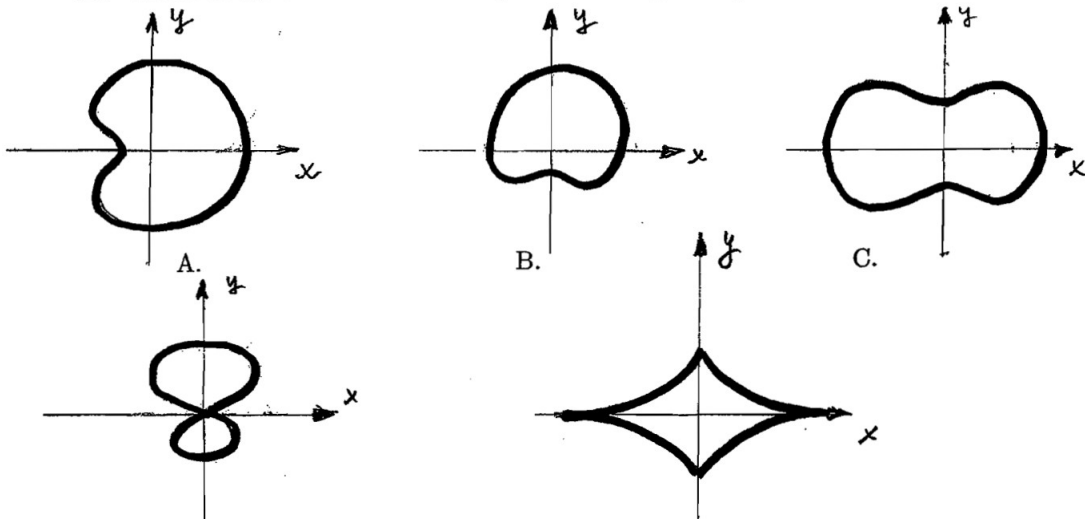# Review Problems

April 5, 2017

1. (Fall 2008, Final Exam, #25) Which of the curves below corresponds to the polar equation $r = 2 + \cos(2\theta)$?

2. (Fall 2013, Final Exam, #23) The equation $r \cos\theta + \sin\theta = \dfrac{2}{r}$ in polar coordinates represents part of

A. a straight line

B. a circle

C. a parabola

D. an ellipse which is not a circle

E. a cycloid

The graph of $r = \cos 2\theta$, $0 \le \theta \le \pi$ looks most like