

HOMEWORK (winter/spring)#5

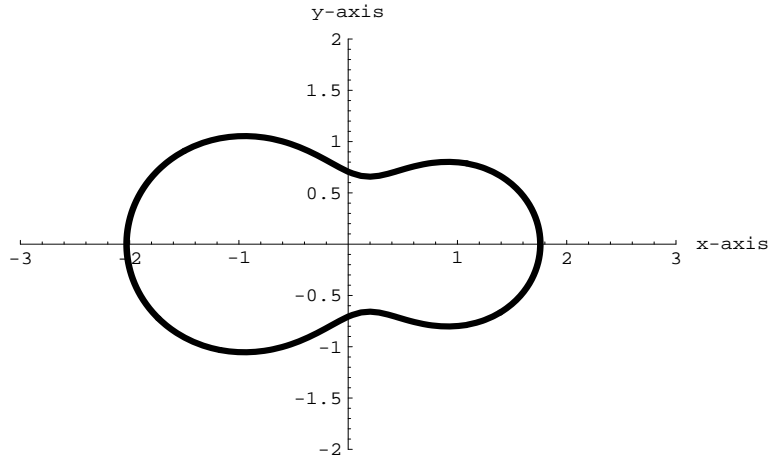
1. Stewart, section 3.4: #9, 13, 15, 21, 22, 23, 34, 41, 49, 54, 65, 79, 82ab.

2. Stewart, section 3.5: #1, 3, 5, 9, 15, 19, 25, 61, 69.

3. Given the equation

$$\frac{1}{(-1+x)^2 + y^2} + \frac{2}{(1+x)^2 + y^2} = 2,$$

the graph is below:



Find the y -intercepts. Use implicit differentiation to find the equations of the tangent lines at the y -intercepts.

4. The graphs of $y = x - 2 \cos(x)$ and two parallel tangential lines are given below. Write the equations of each of the two lines.

