Miniexam 6 (8 points total)   Math 141, Summer 2016

Name:

Problem 1 Find the slope of the tangent line to the curve $x = \ln t,\ y = t + t^2$ at $(x, y) = (0, 2)$.

(a) 3

(b) 1

(c) $\frac{1}{3}$

(d) $\frac{2}{3}$

(e) e

Problem 2 Find the polar equation for the curve represented by $y = 2$.

(a) $r = 2 \csc \theta$

(b) $r = 2 \sec \theta$

(c) $r = 2 \cot \theta$

(d) $r = \frac{\csc \theta}{2}$

(e) $r = \frac{\sec \theta}{2}$

Problem 3 Consider a cardioid $r = 1 + \cos\theta$. (i) Sketch it. (ii) Compute the area enclosed by it.

Feedback:

1. Any comments (on lectures, homework, quizzes, course, me, etc.)?