Calculus II (Math 232) Quiz

December 10, 2014   Professor Ilya Kofman

Justify answers and show all work for full credit. No graphing calculators.

NAME: _____

1. Find the surface area of revolution about the x–axis for $y = x^3$ for $0 \leq x < 2$.

2. Find a path $c(t)$ that traces the line $y = 2x + 3$ from $(2, 7)$ to $(4, 11)$ for $0 \leq t \leq 1$.

3. Sketch the (real part of the) polar curve $r = \sqrt{\sin(2\theta)}$.

4. Find the area that is inside the curve $r = \sqrt{2} \sin(\theta)$ and outside the unit circle.