

Name: _____

Section: _____

R·I·T SCHOOL OF MATHEMATICAL SCIENCES

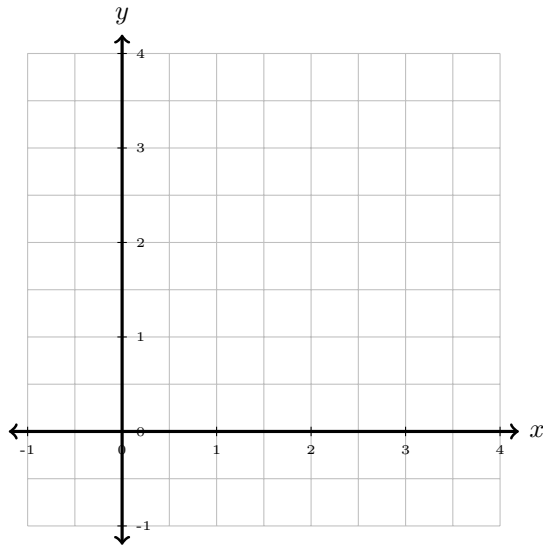
Homework 2

MATH 211

1. Evaluate the iterated integral.

$$\int_0^{\pi/3} \int_0^{\sec \theta} \sec \theta \, dr \, d\theta$$

2. Use double integration to find the area of the region bounded by $y = 2x - x^2$ and $-x + y = 0$. You must sketch the region.



3. Use double integration to find the volume of the solid bounded above by $z = 1 + 2x - 3y^2$, and below by the region bounded by $y = \sqrt{x}$, $x = 4$ and $y = 0$. You must sketch the region.

