

Math 115, Quiz 3

Name:

Date: Wednesday October 23

Duration: 20 min.

PROBLEM 1:

Sketch the region of integration, reverse the order of integration and evaluate the integral:

$$\int_0^2 \int_0^{4-x^2} \frac{xe^{2y}}{4-y} dy dx.$$

PROBLEM 2:

1. Find the number of different words that can be formed with the letters of *ARRANGE*.
2. Find the number of ways that 5 people can sit in a row of 5 seats. What if they want to sit around a circular table?

PROBLEM 3:

A coin is flipped 10 times and we record the results. What is the probability that at least 2 heads appear? Answer first these two questions:

1. How many possible outcomes are there?
2. How many outcomes have at least 2 heads?