AMAT 362—Work Sheet 20

Dr. Justin M. Curry

NOT ASSIGNED. NOT DUE.

Name: _____

N.B. This worksheet is not due! We will focus on problems from the last worksheet, but here are a few "higher dimensional" situations worth considering.

1. Consider the uniform distribution on the unit sphere. Let Θ denote the latitude (radians above the equator). Find the PDF for Θ.

2. Consider the y coordinate of a point chosen uniformly at random on the unit sphere. Denote the resulting random variable by Y. Find the PDF for Y.