

Name \_\_\_\_\_

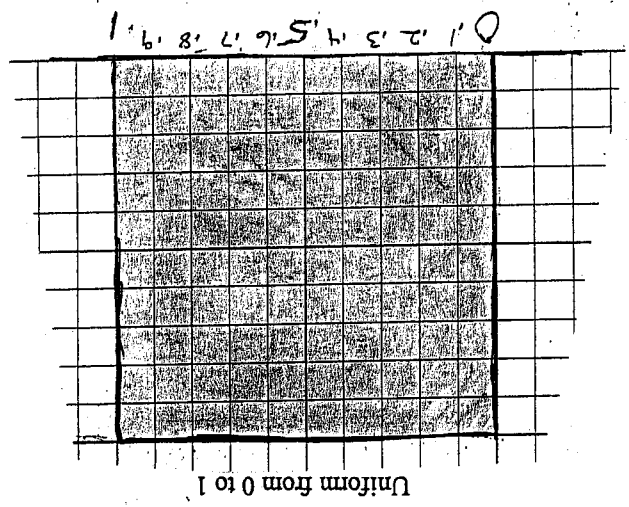
Tables for simple Models (Densities) Math 151

Day \_\_\_\_\_

- 1) Convince yourself that each density actually has area 1, using geometry and/or counting squares. Each small square has area  $1/100$  or  $.01$ . (Each big square has 25 small squares, or  $25/100$  or  $.25$ .)
- 2) Fill in the missing values in the tables, using geometry and/or counting squares and parts of squares. Each value is the area under the curve to the left of the "x" value. It represents the proportion of observations below x.
- 3) Answer the extra questions.

A. Uniform

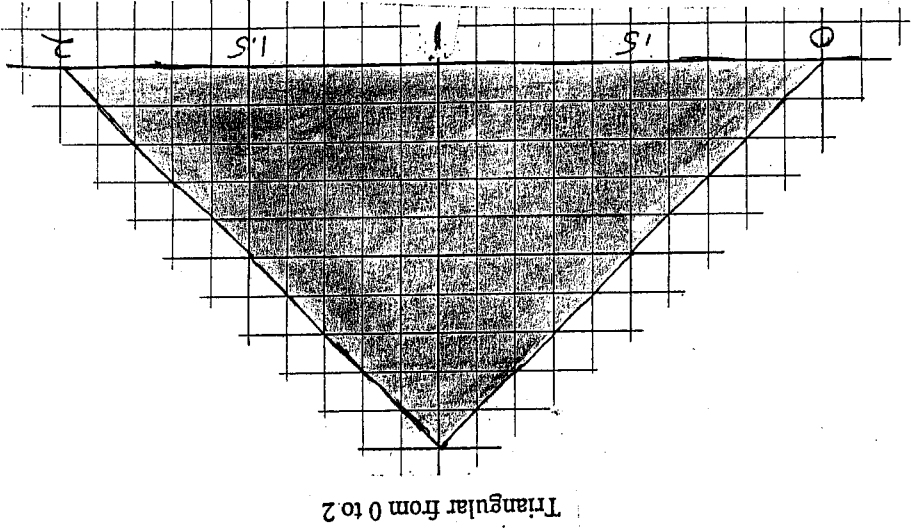
x	Area to the left of x
0	0
.1	.1
.2	.2
.3	.3
.4	.4
.5	.5
.6	.6
.7	.7
.8	.8
.9	.9
1.0	1.0
1.1	1.1



- a) The area below (to the left of) .6 is \_\_\_\_\_. To the right of .6 is \_\_\_\_\_. They sum to \_\_\_\_\_.
- b) The area to the left of .6 is \_\_\_\_\_. Below .2 is \_\_\_\_\_. Between .2 and .6 is \_\_\_\_\_.
- c) What x value has area .4 TO THE RIGHT OF it? \_\_\_\_\_ What is the 40<sup>th</sup> percentile? \_\_\_\_\_

B. Triangular

x	Area to the left of x
0	0
.2	.2
.4	.4
.6	.6
.8	.8
1	1
1.2	1.2
1.4	1.4
1.6	1.6
1.8	1.8
2.0	2.0



- a) The area to the left of .6 is \_\_\_\_\_. To the right of .6 is \_\_\_\_\_. They sum to \_\_\_\_\_.
- b) The area below 1.6 is \_\_\_\_\_. Below 1 is \_\_\_\_\_. Between 1 and 1.6 is \_\_\_\_\_.
- c) What x value has area .92 ABOVE it? \_\_\_\_\_ (Hint: What x value has area .08 Below it?) What is the 8<sup>th</sup> percentile? \_\_\_\_\_