Name: _____

Sheet 831: Reading the Standard Normal Probability Table

Table entries are areas under the curve to the left of z. The curve is symmetric about $z = 0$, the mean. Areas add and subtract. The total area is 1.000. Areas under the standard normal curve can be converted into percentages.

1. What is the percentage, to 2 decimals (e.g. 98.12%), of each range of values:

a) $z < -1$

b) $-1 < z < 1$

c) $z > 2$

d) $-1 < z < 2$

e) $z > 3$

f) $z > 1.67$

2. Find the approximate z-scores using the percentages:

a) An area of 67.00% to the left of this z score.

b) An area of about 30% symmetrically centered on $z = 0$.

3. Find the percentages for the following standard deviations (SD) and x-value measurements:

a) SD = 5. Mean = 6. Find the area for $x < 8$.

b) SD = 2. Mean = 0. Find the area for $-5 < x < 5$.