Math 115 - Quiz 6

Name _____

October 9, 2014

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (2 points) The data below show the maximum daily temperatures (in °F) at Chicago's O'Hare Airport during the month of April 2014.

$$
\begin{array}{cccccccccc}
38 & 43 & 45 & 48 & 51 & 51 & 51 & 52 & 53 & 54 \\
55 & 57 & 57 & 57 & 59 & 60 & 60 & 61 & 62 & 62 \\
63 & 64 & 66 & 66 & 69 & 70 & 70 & 74 & 79 & 80
\end{array}
$$

   (a) Find the percentile for 66°F.

   (b) Find the temperature at the 50th percentile.

2. (3 points) Suppose you paid \$3.07 for gas when the mean and standard deviation were \$3.20 and \$0.06, respectively. Then you paid \$3.50 for milk when the mean and standard deviation were \$3.67 and \$0.09, respectively. Compute the z-scores for the gas and milk. Was either price unusually low?