Name: _____

Exam 2 review material

Find the mean, standard deviation and variance for the following data sets. Remove all outiers.

0.46	0.51	0.53	0.42	26.2	0.55

21	23	27	18	522

0.001	0.1	0.11	0.09	0.08	0.14

Explain the concept of the z-score. What does a z-score tell us?

Assume normal distribution for the following situations.

The average kilometers per liter of gasoline that cars in the United States get is 51.2 with a standard deviation of 5.1.

What percent of cars get between 62 and 55?

What percent of cars get above 53? what percent get below 48?

For the above two questions, draw a graph of the normal distribution curve to show what the the percentages represent.

A recent study show that people whose blood pressure is in the top 10% are in danger of having a heart attack. The average diastolic blood pressure is 126 with a standard deviation of 12.1. What blood pressure will put a person in danger of having a heart attack?

Another study shows that people with blood pressures in the lowest 2% are at risk of fainting while exercising. What blood pressure measurement will put a person at risk for this?

What percent of people are between 167 and 110?