1. Which of the following statement is NOT true?
2. We use s to denote the sample standard deviation.
3. We use σ to denote the population standard deviation.
4. We use σ to denote the population mean.
5. For the following dataset, the sample mean is 4.5, the sample variance is 3.5, the sample standard deviation is 1.870829.

3,6,2,7,4,5

Now, multiply each value by 2, what is the new mean, new variance and new standard deviation?

1. 4.5, 14, 3.5
2. 4.5, 3.5, 1.870829
3. 9, 14, 3.7416
4. 9, 7, 3.7416
5. This is a standard deviation contest, which list of numbers have the largest standard deviation? No calculations are required.
6. 10, 10, 10, 10
7. 20, 20, 20, 20
8. 10, 10, 20, 20
9. 10, 15, 15, 20

For each of the scenarios determine the response variable.

1. A survey wants to know if there is a relationship between age and health care cost.
2. age b. health care cost c. Not enough information
3. In a stadium, is the number of hot dogs sold related to the number of sodas sold?
4. Number of hot dogs sold
5. Number of sodas sold
6. Not enough information