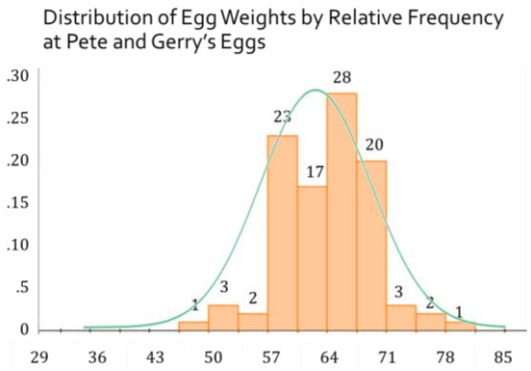
2.2.A Density Curves

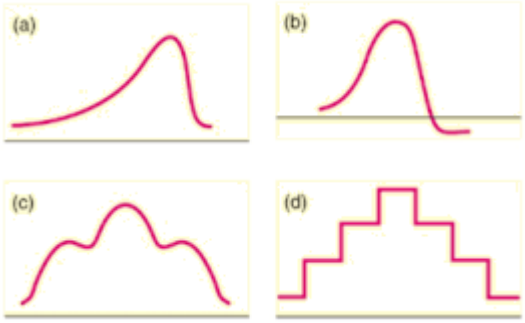
The density curve follows the shape of a _____.

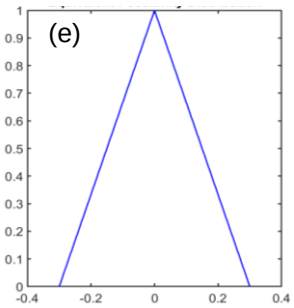


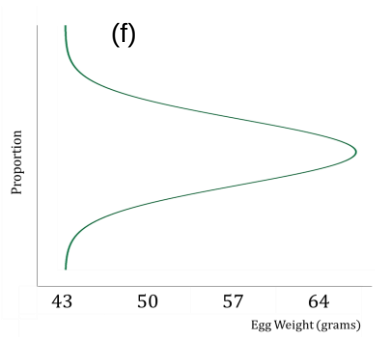
There are only 2 properties that you need to remember for density curves:

- The area under the curve is always ____.
- The curve must lie ___ or _____ the x-axis.

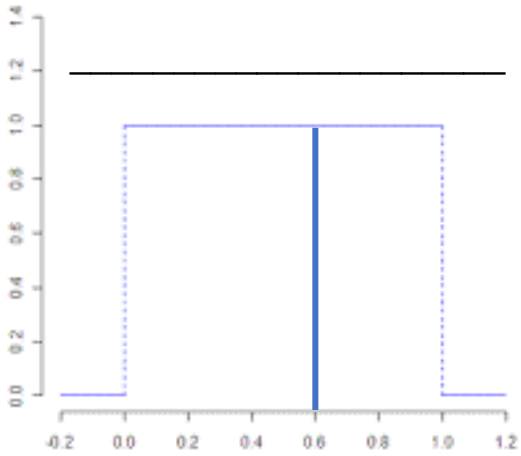
Which of the following curves is not a density curve?



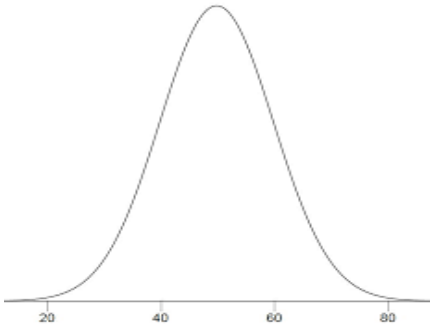




What are the names of these two common density curves?



_____



_____

For the uniform density curve above, what is the area for the data value 0.6? _____

2.2.A Density Curves

The normal curve is described by three terms:

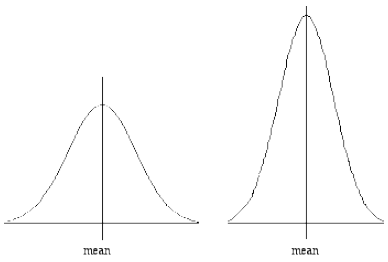
- _____-shaped.
- _____
- _____

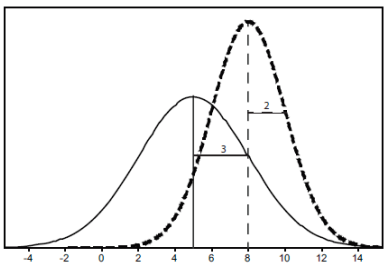
The normal curve is completely characterized by its _____(__) and its _____(__).

The Empirical Rule is also known as the _____-_____-_____ Rule. It is a good starting point for determining percentiles. This rule tells us that:

- Around 68% of the data will fall within ____ standard deviation of the mean.
- Around 95% of the data will fall within ____ standard deviations of the mean.
- Around 99.7% of the data will fall within ____ standard deviations of the mean.

What statistical measure changed in each pair of graphs?





_____ _____

Name three things in nature that follow a bell-curve?

_____ _____ _____

What is the difference in number of peaks of a normal curve and a density curve?

What is the formula for calculating a z-score?