Part 5: Continuity Corrections

All of the distributions that we have done so far have been for continuous data, however often times we want to model discrete data with a continuous distribution. For example we might know the number of units a company sells of a particular product is between a and b, but we don't have any more information than this. We will look at situations where this happens for the uniform, triangular and normal distributions, and then mix it up a bit at the end with a combination of the distributions where you have to choose which distribution you think is best.

We need to think about what the number is rounded to, for 'number of' type questions it is obviously rounded to the nearest whole number, but sometimes things are measured to the nearest 0.1 m for example. If this is the case then it will tell you what it has been measured to, so you'll know you need to use a continuity correction, but for 'number of' you'll need to always assume it has been rounded to the nearest whole number.