

### Poisson Probability

This is a discrete distribution, which approximates the normal distribution with increasing values of the mean (**lambda**). You will notice the plot of the distribution has steps indicating you can only use integer values for the **x** value. **Lambda** can be any real value. The maximum value (for display purposes only) can be altered to increase or reduce the scale factor along the horizontal axis. The probabilities shown can be shown as:  $X = x$ ,  $X < x$ ,  $X > x$ ,  $X \leq x$ , or  $X \geq x$  and the shaded area under the curve will alter accordingly.