

# Econ 424 Lecture 3: Review of Probability Concepts

Note Title

10/7/2009

How to specify the file name in the R function  
`read.csv()`:

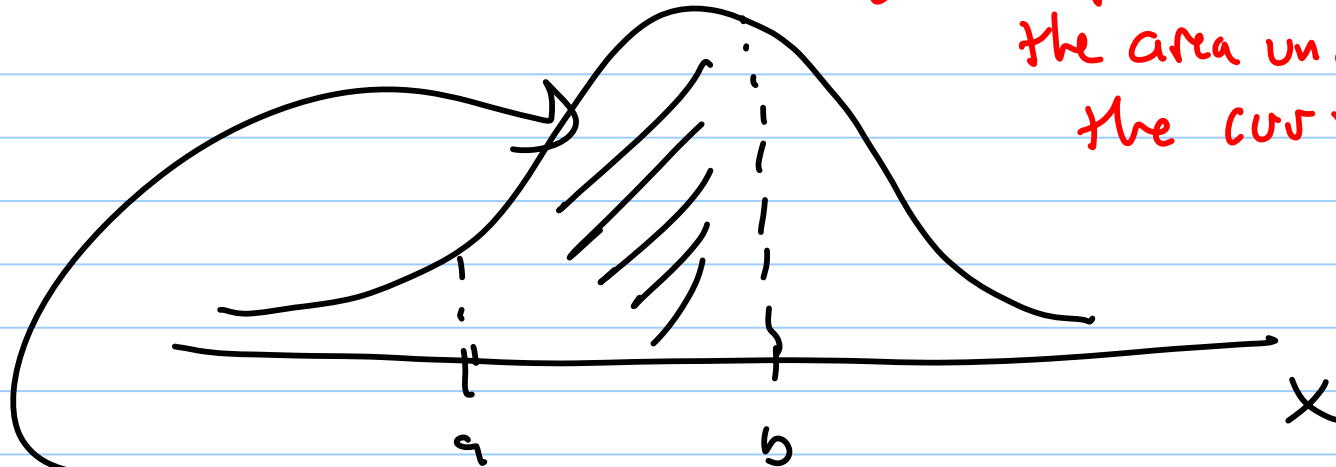
`file = "C:\mydat\shoxPrices.csv"` **WRONG!**

Single Backslash doesn't work

= `"C:/mydat/shoxPrices.csv"` **OK**

= `"C:\\mydat\\shoxPrices.csv"` **OK**

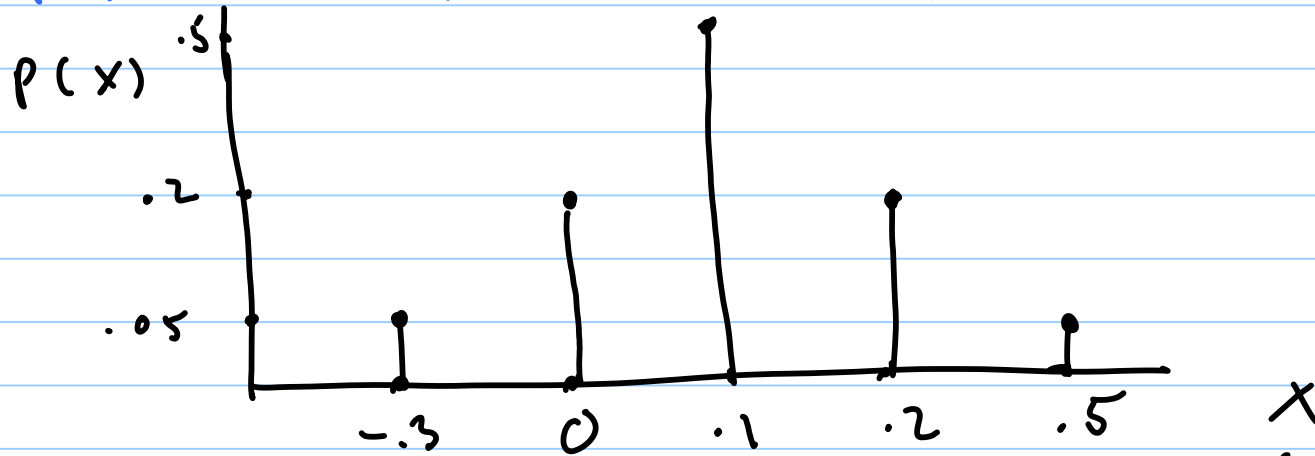
For continuous RV, probability is represented as the area under the curve:



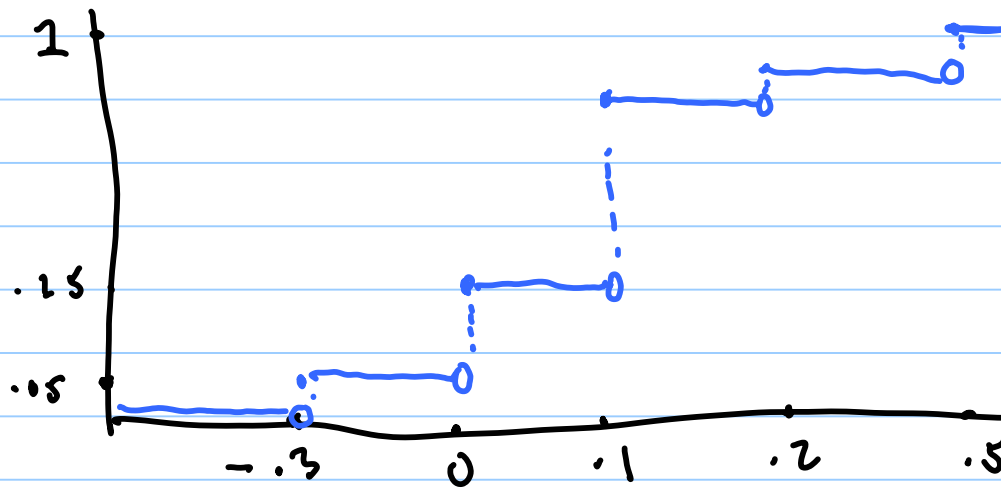
$\Pr(a \leq X \leq b) =$  Area under prob curve over interval

$$\Pr(a < X < b)$$

# Ex: CDF for Discrete distribution



$$F_x(x) = \Pr(X \leq x)$$



$$\Pr(X < -0.3) = 0$$

$$\Pr(X = -0.3) = 0.05$$

$$\Pr(X \leq 0) = 0.05$$

$$\Pr(X = 0) = 0.2$$

$$\Pr(X \leq 0.1) = 0.25$$

$$\Pr(X = 0.1) = 0.5$$

$$\Pr(X < 0.2) = 0.75$$

$$\Pr(X = 0.2) = 0.2$$

$$\Pr(X \leq 0.5) = 0.95$$

$$\Pr(X = .5) = .05$$

$$\Pr(X \leq .5) = .2$$