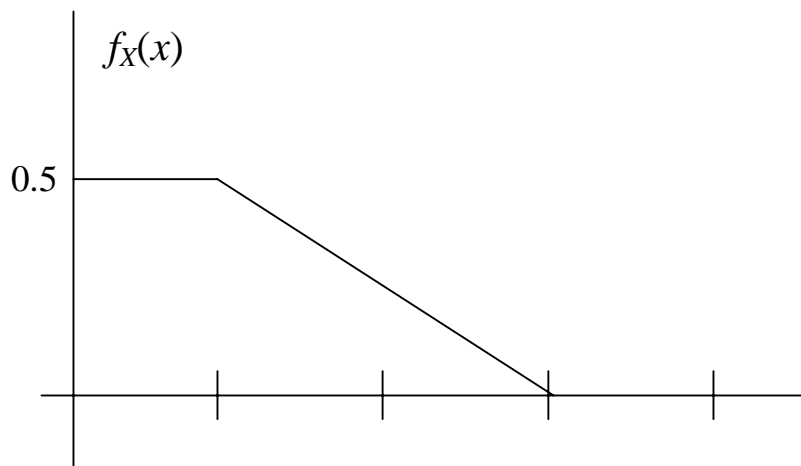


Quiz 5

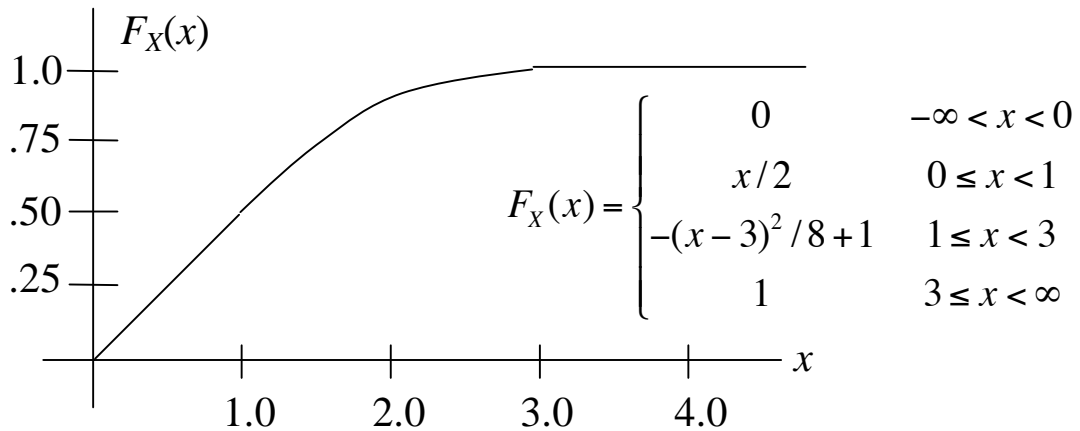
ECEn 370

Name: _____ Key _____

1. Consider the probability density function (pdf) plotted below for a random variable X :



- a) Sketch the Probability Distribution Function (PDF) and label the vertical axis.



- b) Calculate $P[0.5 \leq X \leq 1.5]$.

$$= \int_{0.5}^{1.5} f_X(x) dx = (1-1.5)(0.5) + 0.5(.05 + .375)/2 = 0.46875$$