

## ECE 3710

### Quiz 4

#### Topic: Chapter 2, Probability and Discrete Random Variables

Name(s): \_\_\_\_\_

1.  $X$  is a discrete random variable with the following outcomes and distributions.

$x$	0	1	3	4	5
$p(X=x)$	0.1	0.2	0.2	0.4	0.1

Answer to the following parts. Show your work.

- a)  $p(x \leq 4)$
- b)  $p(1 \leq x < 3)$
- c) Mean of  $x$
- d) Sketch the probability mass function (pmf)  $f(x)$ .
- e) Sketch the cumulative distribution function (cdf)  $F(x)$ .