

## Section 9/16

### 1 Question 3.6

In a population of 200 voters, 70 are registered with Party A and the other 130 are registered with Party B. A simple random sample of 40 voters is drawn from this population. Let  $V$  be the number of sampled voters who are registered with Party A, and let  $W=40V$  be the number of sampled voters who are registered with Party B Find:

a)  $P(V = 10)$

b)  $P(V > 10)$

c)  $P(W < 3V)$

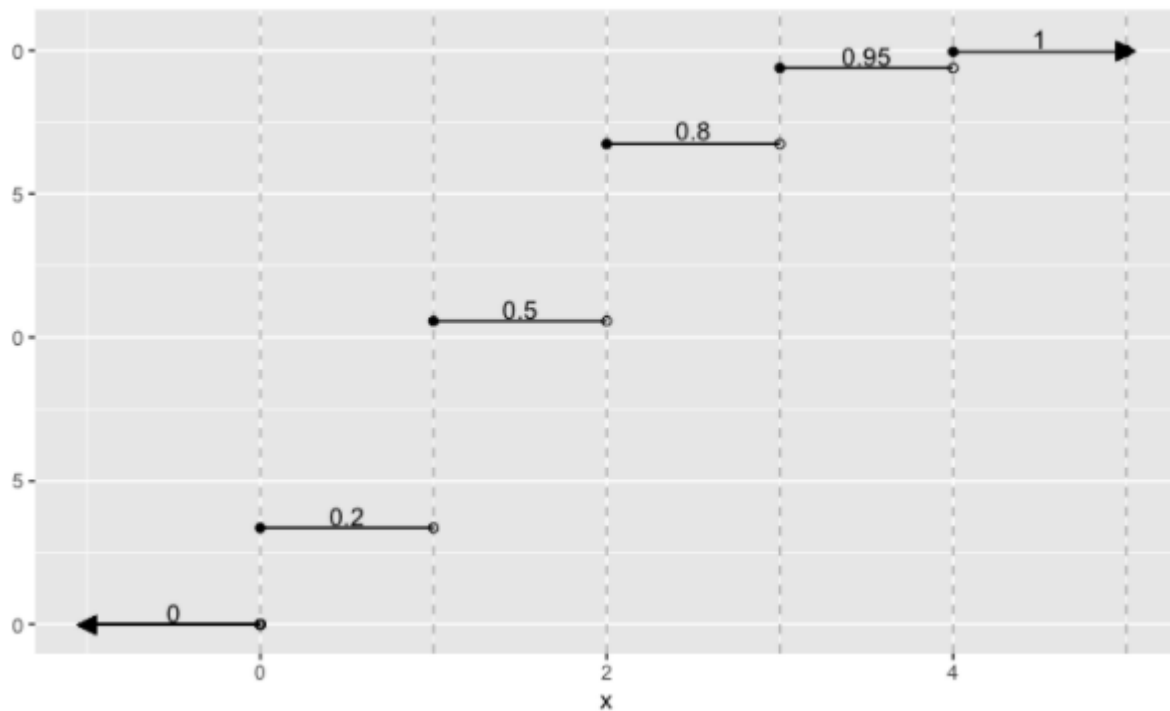
d)  $F(V)$  (The CDF of  $V$ )

## 2 Question 1.4

2. A random variable  $W$  has the distribution shown in the table below. Sketch a graph of the cdf of  $W$ .

$w$	-2	-1	0	1	3
$P(W = w)$	0.1	0.3	0.25	0.2	0.15

### 3 Previous Quiz Question



The figure above is the graph of the cdf of a random variable  $X$ . The numbers on the line segments are the values of  $F(x)$ .

Use it to answer the following questions:

a.) What is  $P(X = 1)$ ?

b.) What is  $P(1 \leq X \leq 3)$ ?

b.) What is  $P(|X - 1| > 1)$ ?