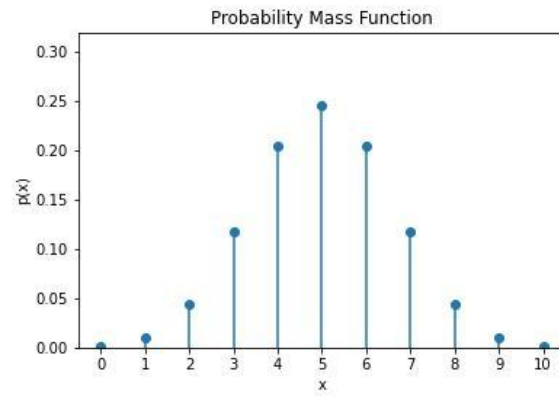


1

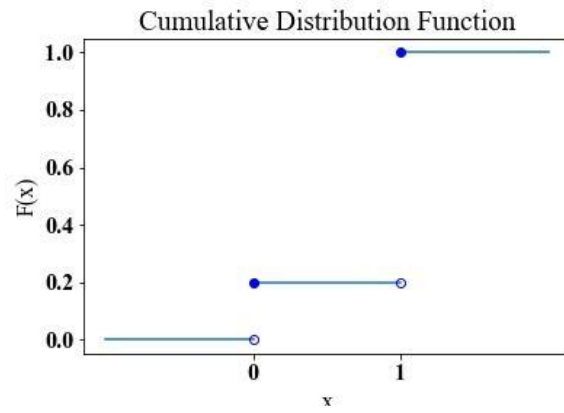
Select the two-parameter distribution below that best fits the graph. (2 Points)



- ☐ General Discrete
- ☐ Discrete Uniform
- ☐ Bernoulli
- ☒ Binomial
- ☐ Poisson
- ☐ Continuous Uniform
- ☐ Normal
- ☐ Exponential

2

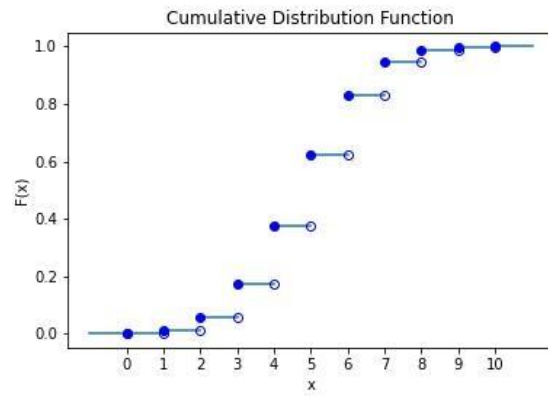
Select the one-parameter distribution below that best fits the graph. (2 Points)



- ☐ General Discrete
- ☐ Discrete Uniform
- ☒ Bernoulli
- ☐ Binomial
- ☐ Poisson
- ☐ Continuous Uniform
- ☐ Normal
- ☐ Exponential

3

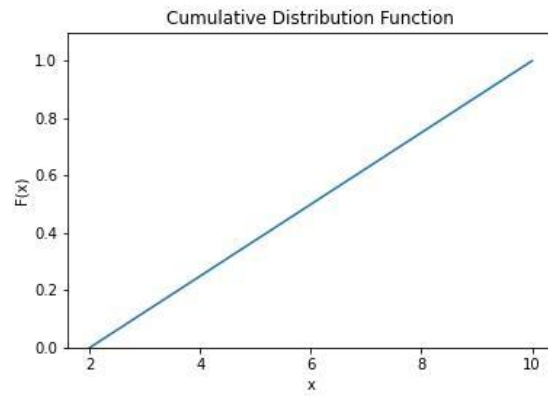
Select the one-parameter distribution below that best fits the graph. (2 Points)



- ☐ General Discrete
- ☐ Discrete Uniform
- ☐ Bernoulli
- ☐ Binomial
- ☒ Poisson
- ☐ Continuous Uniform
- ☐ Normal
- ☐ Exponential

4

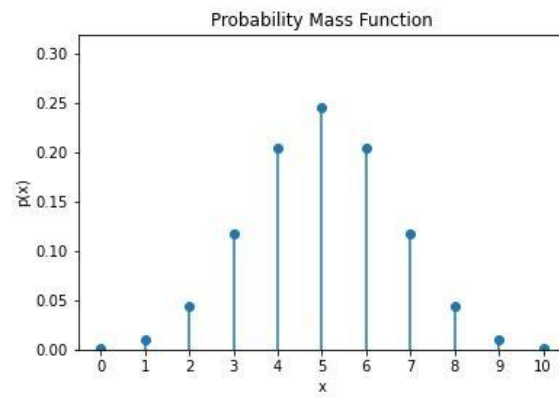
Select the two-parameter distribution below that best fits the graph. (2 Points)



- ☐ General Discrete
- ☐ Discrete Uniform
- ☐ Bernoulli
- ☐ Binomial
- ☐ Poisson
- ☒ Continuous Uniform
- ☐ Normal
- ☐ Exponential

5

Given the graph of the PMF of X , what is the probability that random variable X is less than or equal to 2? Select the best answer. (2 Points)



☐ 0.22

☐ 0.125

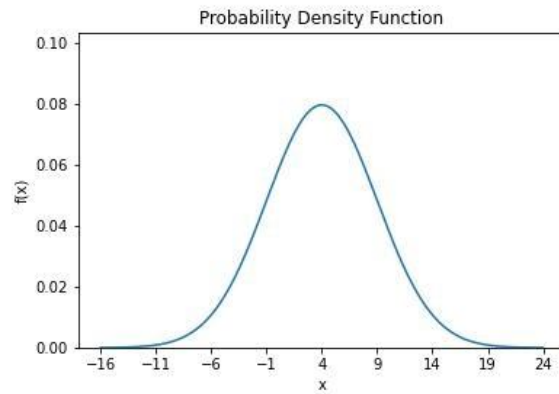
☐ 0.05

☒ 0.0625

☐ 0

6

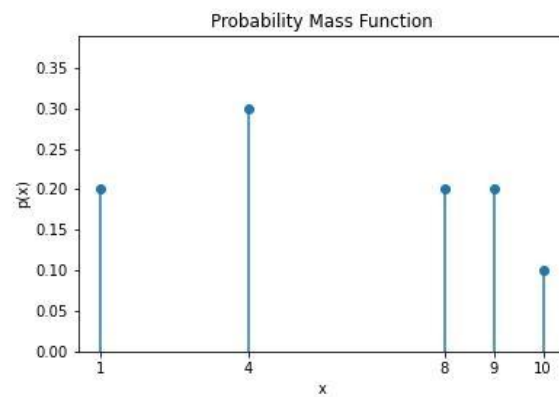
Given the graph of the PDF of X , what is the probability that random variable X is exactly equal to 4.0? Select the best answer. (2 Points)



- ☐ 0.5
- ☐ 0.8
- ☐ 1
- ☒ 0

7

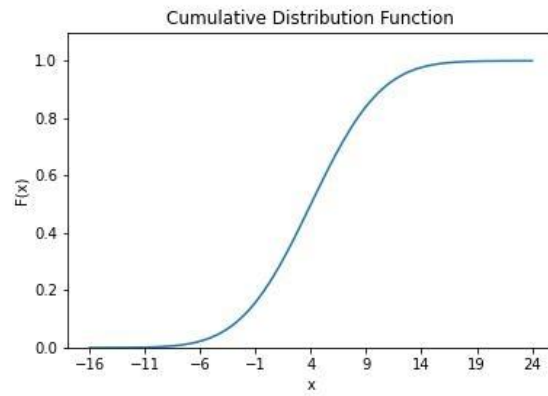
Based on this graph, the sample space of random variable X is: (2 Points)



- ☐ [1,10]
- ☒ {1,4,8,9,10}

8

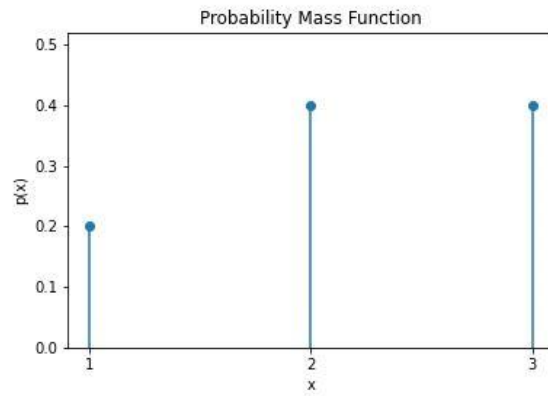
Given the graph of the CDF of X , the probability that random variable X is greater than 14 is approximately: (2 Points)



- ☐ 1
- ☐ 0.75
- ☒ 0.02
- ☐ 0.66

9

What is the expected value of random variable X given the graph of its PMF? (2 Points)



☐ 0.4

☐ 1

☐ 1.5

☒ 2.2

☐ 3

10

The sample space of a Bernoulli random variable is (2 Points)

☐ $[0, \infty)$

☐ $(-\infty, \infty)$

☐ $[0, 1]$

☒ $\{0, 1\}$