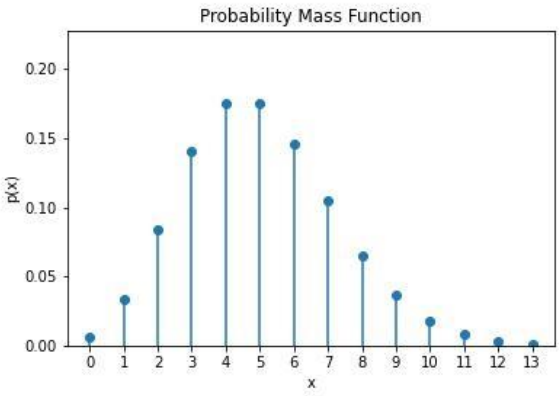
1

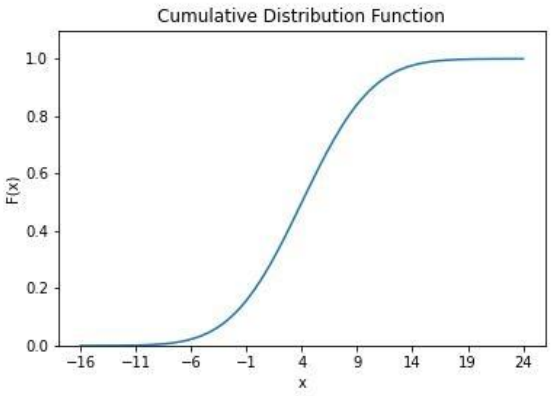
Select the one-parameter distribution below that best fits the graph. (2 Points)



- ◯ General Discrete
- ◯ Discrete Uniform
- ◯ Bernoulli
- ◯ Binomial
- ⓧ Poisson
- ◯ Continuous Uniform
- ◯ Normal
- ◯ Exponential

2

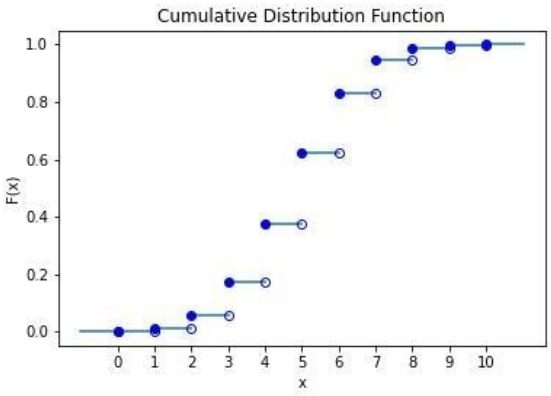
Select the two-parameter distribution below that best fits the graph. (2 Points)



- ◯ General Discrete
- ◯ Discrete Uniform
- ◯ Bernoulli
- ◯ Binomial
- ◯ Poisson
- ◯ Continuous Uniform
- Ⓧ Normal
- ◯ Exponential

3

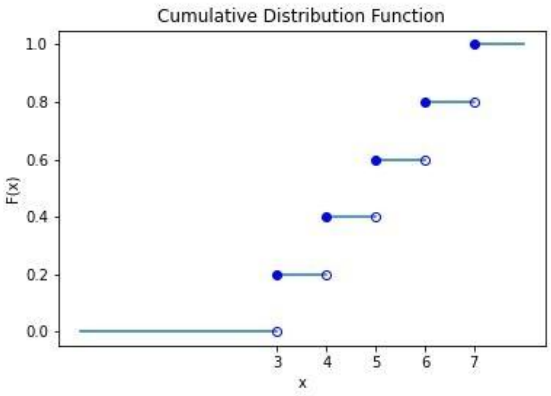
Select the two-parameter distribution below that best fits the graph. (2 Points)



- ◯ General Discrete
- ◯ Discrete Uniform
- ◯ Bernoulli
- Ⓧ Binomial
- ◯ Poisson
- ◯ Continuous Uniform
- ◯ Normal
- ◯ Exponential

4

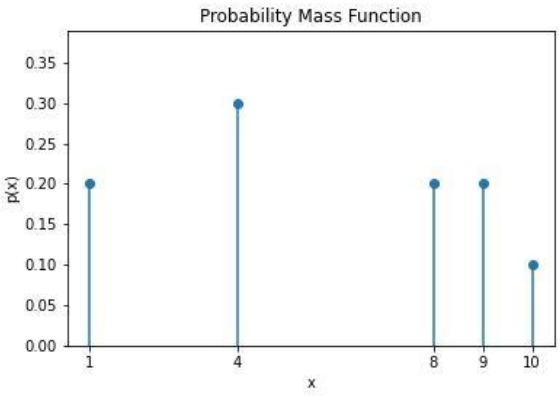
Select the two-parameter distribution below that best fits the graph. (2 Points)



- ◯ General Discrete
- ⓧ Discrete Uniform
- ◯ Bernoulli
- ◯ Binomial
- ◯ Poisson
- ◯ Continuous Uniform
- ◯ Normal
- ◯ Exponential

5

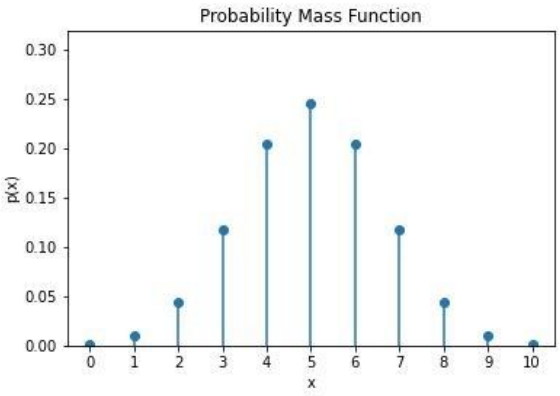
Select the distribution below that best fits the graph.
(2 Points)



- [X] General Discrete
- [ ] Discrete Uniform
- [ ] Bernoulli
- [ ] Binomial
- [ ] Poisson
- [ ] Continuous Uniform
- [ ] Normal
- [ ] Exponential

6

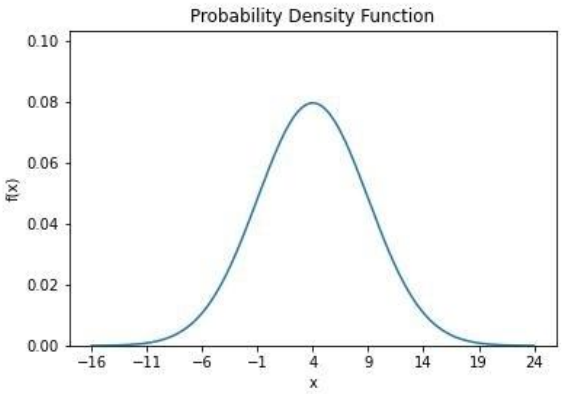
Given the graph of the PMF of X, what is the probability that random variable X is between 4 and 5 (included)? i.e. P(4 <= X <= 5). Select the best answer. (2 Points)



- ◯ 0
- ◯ 0.2
- ◯ 0.25
- Ⓧ 0.45
- ◯ 1

7

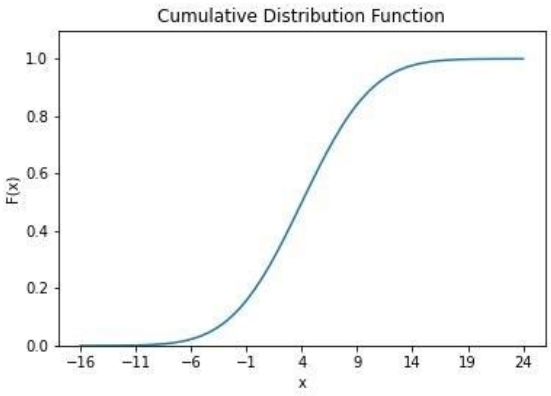
Given the graph of the PDF of X, what is the probability that random variable X is less than or equal to 4.0? Select the best answer. (2 Points)



- ◯ 0
- ◯ 0.08
- Ⓧ 0.5
- ◯ 1

8

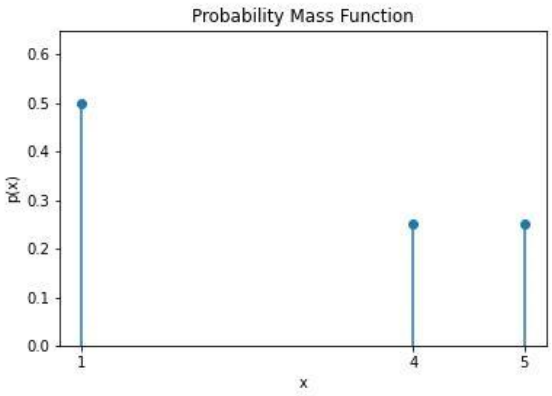
Given the graph of the CDF of X, the probability that random variable X is greater than -1 is approximately: (2 Points)



- ◯ 0.18
- ◯ 0.02
- (X) 0.82
- ◯ 0.95

9

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



- ◯ 1
- ◯ 1.5
- ⓧ 2.75
- ◯ 4.25

10

The sample space of an exponential random variable is (2 Points)

- ⓧ $[0, \infty)$
- ◯ $(-\infty, \infty)$
- ◯ $[0, 1]$
- ◯ $\{0, 1\}$