Probability II – Classwork

8/15/2019

1. What is a distribution?

2. What is the difference between discrete and continuous variables?

3. What is the difference between the pmf, pdf, and CDF?

4. What is a random variable?

5. Political science graduate students are asked to read many articles per week. For a given number of articles, the table shows the number of students who have read the corresponding number of articles. Use the table to answer the following questions:

    a. Draw a graph for the pmf.

    b. What is $P(X = 3)$?

    c. What is $P(X \geq 8)$?

    d. Calculate the average number of articles (expected value) that graduate students read.

    e. Calculate the variance.

    f. Calculate the standard deviation.

Articles	Number of Graduate Students
1	0
2	2
3	2
4	4
5	3
6	3
7	5
8	7
9	8
10	8