Name:
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MATH 1342
Quiz 4.4

A fair, six-sided dice is rolled 5 times. On each roll, a success is if the dice rolls a 5 or a 6 and a failure is if the dice reads 1, 2, 3, or 4.

(1) Complete the Binomial Distribution for this experiment. Show $P(x = 2)$ by using the formula that uses the binomial coeficient from the formula sheet. The others you can use your calculator's binomialPDF function.

x	0	1	2	3	4	5
$p(x)$						

(2) Calculate the probability of having 4 or 5 successes, that is $P(x \geq 4)$. Then use that to calculate $P(x < 4)$.

(3) Find the mean and standard deviation for this Binomial Distribution using the formula sheet (i.e. $\mu = np$)