Name(s) and NetId(s):

Answer the following questions. Make sure to show your work.
(The last question is on the other side.)

- When rolling two dice, what is the probability that you get a 3 on the first die and a number greater than 3 on the second?

- When rolling two dice, what is the probability that the sum is greater than or equal to 7, but less than 10?

- What is the probability distribution and the expected value when rolling one five-sided fair die?

- What is the probability distribution and the expected value when rolling two five-sided fair dice?

- You and a friend decide to play gambling dice. It costs $1.00 to play. If you roll a 5 or 6, you get a prize of $2.00 (one dollar profit). If you roll any other value, you win nothing (you lose one dollar). What is the expected value of your winnings/loses?