<u>WRITTEN HOMEWORK – CONDITIONAL PROBABILITY</u>

1) Suppose you are picking up 2 cards one after the other from a standard deck of 52 cards without replacement. Answer the following questions.

    I.   How does the first draw reduce the sample space for the second draw?

    II.   If you get a spade for the first draw, what is the probability of getting a black card in the second draw?

2) Data collected from 500 students at a university to get information on how many times a semester does the full time and part time students attend tutoring in Math showed the following

	Attended tutoring one or fewer times	Two to three times	Four or more times	Total
Full time student	50	144	100	294
Part time student	140	60	6	206
TOTAL	190	204	106	500

    I.   Find the probability that a randomly chosen student attended tutoring two or three times during the semester given that they are a full-time student.
        (Always write the formula for the specific events first)

    II.   Find the probability that a randomly chosen student is <u>not</u> a part time student, given that the student attended tutoring four or more times.

3) Reflect on how the first 4 weeks of your semester went and what changes, if any, would you want to make in the remaining weeks of the semester. You can discuss this with the LA and get their input also.