Directions: Please answer all items on this problem set. You must show all your work.

1. Suppose you are trying to hire for an entry level position in your agribusiness firm where spreadsheet skills are an important component to the success of the candidate. You have been authorized by your boss to pay an individual with superior skills $60,000 and a person with good skills $40,000. Since the Agribusiness program at Cal Poly has many courses that teach spreadsheet skills, you are inclined to recruit from only this program.

Having talked to several professors, you have discovered that Cal Poly Agribusiness students can be categorized as either having superior spreadsheet skills or good spreadsheet skills. One way to measure an individual’s skills is by summing up the person’s total quality points earned in the spreadsheet oriented classes where quality points are defined as GPA in a class times the number of units in the class, e.g., if a student gets an A in the class and the class is a 4 unit class, then the student is awarded 16 quality points in total. Having talked to local tutors, you have found that a student with good spreadsheet skills pays $500 per quality point while students with superior spreadsheet skills pays $200 per quality point. Using the idea of an incentive compatibility constraint, how many quality points would you need to request the candidate to demonstrate on his/her transcript for the $60,000 job to ensure that you get a superior spreadsheet skills candidate? (10 Points)

2. Solve problem S2 on pages 406 and 407. (50 points)