1. Consider the following facts
   - A contracts with B for the delivery of a part at a per unit price of $20.
   - A will use the part to produce widgets (one part per widget) that are in turn sold at a market price of $30 each.
   - The contract between A and B calls for the delivery of 200 units.
   - A’s production costs for 200 widgets = $800 plus the cost of the part (assume the $800 is a cost incurred when output is produced but that does not vary with the level of output, i.e., a constant variable cost).

a) If B breaches, at what level should damages be set?

\[
TR = 30 \times 200 = 6,000
\]

\[
TC = 20 \times 200 + 800 = 4,800
\]

\[
Profit = PED = 1,200
\]

b) Is A’s reliance on its contract with B efficient? Show proof.

\[
MEB = 5 \times 200 \times 0.7 = 700
\]

\[
MEC = 10 \times 200 \times 0.3 = 600
\]

\[
MEB > MEC \Rightarrow Reliance \ is \ efficient
\]
2. Assume Collegiate Apparel, Inc. (CAI) has contracted with Basic Ts for the delivery of a shipment of plain t-shirts that will be used to manufacture t-shirts featuring the UIUC logo. The contract calls for Basic Ts to deliver 100 plain shirts to CAI at a price of $5 per unit. CAI can sell the UIUC t-shirts to a number of different retailers for $15 per unit. CAI’s production costs for 100 UIUC t-shirts = $6 per shirt + the cost of the plain shirts.

a) In order to create the incentive for efficient breach, perfect expectation damages should be set at what level? Why will the level of damages you have specified ensure breach will occur only when it is efficient?

\[ TR = 15 \times 100 = 1,500 \]

\[ TC = (5 + 6) \times 100 = 1,100 \]

\[ Profit = PED = 400 \]

b) Assume that, relying on its contract with Basic Ts, which guarantees delivery of the plain t-shirts within 3 days (delivery from any other supplier takes at least four days), CAI enters into a contract with Follett’s to sell Follett’s 100 UIUC t-shirts for $20 each on the condition that the finished product is delivered within four days (it takes CAI one day to produce and deliver the UIUC t-shirts once it has taken delivery of the plain shirts). In the event that CAI cannot meet its commitment to Follett’s in the time specified, the price per t-shirt will fall to $7. In addition, if Basic Ts does not deliver the plain shirts by the date specified in the contract, CAI will have to purchase the plain shirts from another company at twice the per unit price it has agreed to pay Basic Ts. The probability that Basic Ts will perform its contract with CAI is 0.6. Based on this information, is CAI’s reliance on the contract with Basic Ts efficient? Provide evidence to support your answer.

\[ MEB = 5 \times 100 \times 0.6 = 300 \]

\[ MEC = (8 + 5) \times 100 \times 0.4 = 520 \]

\[ MEC > MEB \Rightarrow \text{Reliance is not efficient} \]