Consider the Sun Oil Excel Solver model attached (" Figures 5-3 to 5-7\_SunOil Example\_revised.xlsx")

Q1: If the demand in Asia doubles, what happens to the total cost and what is the best configuration of plants (draw the picture as in PPT "Solution Map") for Sun Oil under these conditions? Use the Solver Capability. (10)

Q2: Management wants to make sure that each demand region is served by only one supply region. What happens to the total cost and what is the best configuration of plants (draw the picture as in PPT "Solution Map") for Sun Oil under these conditions? Use the Solver Capability. (10)

*Hint*: Thoroughly study the Excel Worksheet titled (Table 5-4 Single Sourcing in 6th edition; Table 5-3 in 7th edition) in the Excel Workbook ([**Figure 5-9 to 5-1\_revised.XLS)**](https://blackboard.uhcl.edu/bbcswebdav/pid-926108-dt-content-rid-5512247_1/xid-5512247_1) **.** The Excel solver model in “Table 5-4 Single Sourcing” provides the constraint to guarantee the single sourcing; Only one supply region per demand region. You may need to modify the Sunil Oil model to the model in Table 5-4 Single Sourcing worksheet.