Problem 2

**2)**     Minimize       Z = 1.80S + 2.20T

       Subject to:     5S + 8T =>  200

                          15S + 6T =>  240

                           4S + 12T => 180

                                      T => 10

                                   S, T => 0

(a)     What are the optimum values of the decision variables and Z?

(b)     Do any of the constraints have (nonzero) slack? If yes, which one(s) and how much slack does each have?

(c)     Do any constraints have (nonzero) surplus? If yes, which one(s) and how much surplus does each have?

(d)     Are any constraints redundant? If yes, which one(s)? Explain briefly.