§7.4: Sensitivity Analysis in Transportation Problems

1.] The optimal solution to the Transportation LP is given in the grid below. Answer the following sensitivity questions:

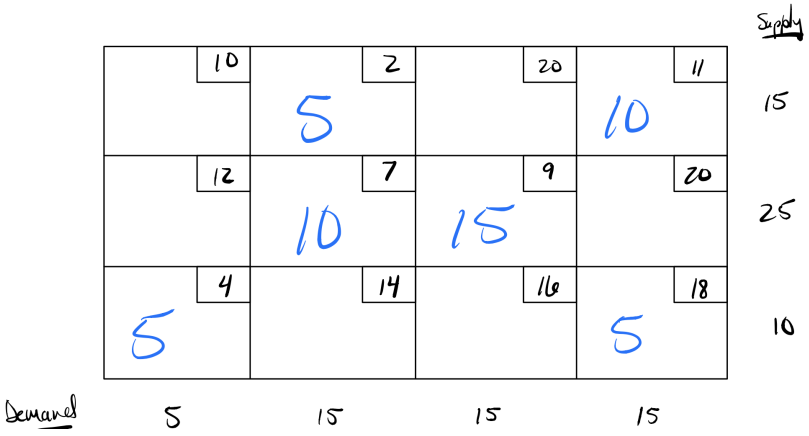
a.) Determine the range of values of c_{33} for which the current basis remains optimal.

					Supply
	10	2	20	11	
		5		10	15
	12	7	9	20	
		10	15		25
	4	14	16	18	
	5			5	10
Demand	5	15	15	15	

b.) Determine the range of values of c_{12} for which the current basis remains optimal.

					Supply
	10	2	20	11	
		5		10	15
	12	7	9	20	
		10	15		25
	4	14	16	18	
	5			5	10
Demand	5	15	15	15	

c.) If s_2 and d_2 are both increased by 2, what is the new optimal solution?



d.) If s_3 and d_3 are both increased by 3, what is the new optimal solution?