



**PROFESSOR:** Daniel Caetano  
**DISCIPLINA:** CCE1014 – Pesquisa Operacional II  
**GABARITO**

### QUESTÕES - AULA 13

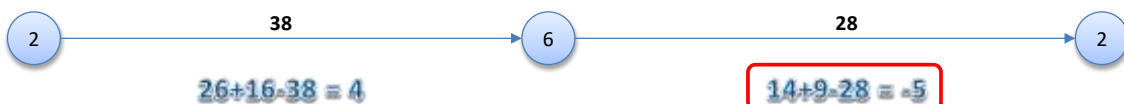
**13.1)** Resolva o problema do caixeiro viajante pelo método da inserção de maior afastamento

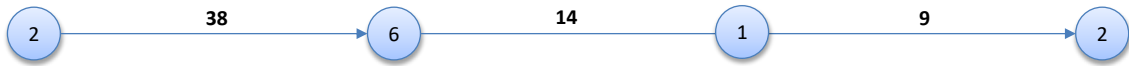
O/D	1	2	3	4	5	6
1	-	9	35	26	18	16
2	26	-	11	15	18	38
3	9	21	-	21	15	11
4	32	33	40	-	36	30
5	37	11	29	26	-	25
6	14	28	13	14	9	-

1	1,2,1: 35	1,3,1: 44	1,4,1: 58	1,5,1: 55	1,6,1: 30
2		2,3,2: 32	2,4,2: 48	2,5,2: 29	<b>2,6,2: 66</b>
3			3,4,3: 61	3,5,3: 44	3,6,3: 24
4				4,5,4: 62	4,6,4: 44
5					5,6,5: 34

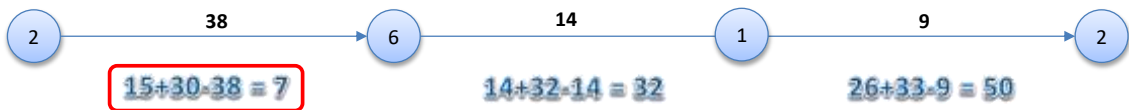


NS/FS	1	3	4	5
2	26	11	15	18
6	14	13	14	9
	14	11	14	9

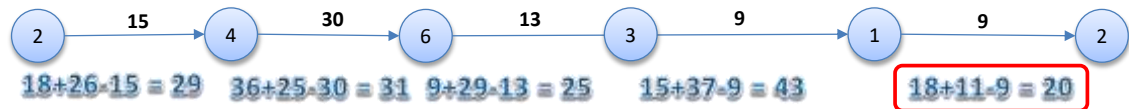
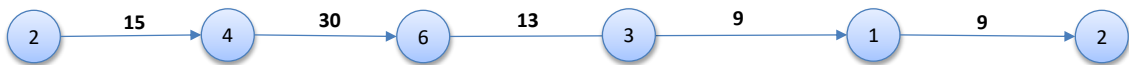
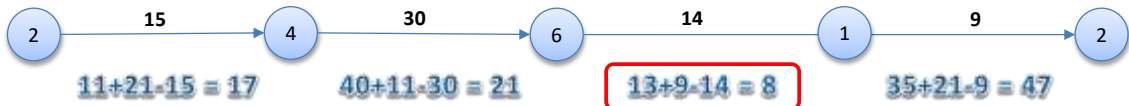




NS/FS	3	4	5
1	35	26	18
2	11	15	18
6	13	14	9
	11	14	9



NS/FS	3	5
1	35	18
2	11	18
4	40	36
6	13	9
	11	9



**Total:  $15+30+13+9+18+11 = 96$**

**13.2)** Compare com o resultado aplicando-se o método do vizinho mais próximo. A solução do item 13.1 é melhor ou pior?

1-2-3-6-5-4-1

Custo:  $9+11+11+9+26+32 = 98$

A solução do item 13.1 é melhor que a solução do vizinho mais próximo.