

Print by: Sirenthia Heard

BUS515007VA016-1144-001: Operations Management / Homework Week 07

Problem 6

Gator Office Systems has interviewed managers in order to develop the from-to matrix:

Department	Trips between Departments					
	A	B	C	D	E	F
A	—	30	—	34	50	25
B		—	—	55	10	10
C			—	—	15	5
D				—	—	—
E					—	30
F						—

The current layout is shown in the figure below.

F	E	A
B	C	D

A better layout has been proposed for Gator Office Supplies:

B	D	C
A	E	F

Compute the *ld* score for Gator Office Supplies' current and proposed layouts.

Current Layout

Proposed Layout

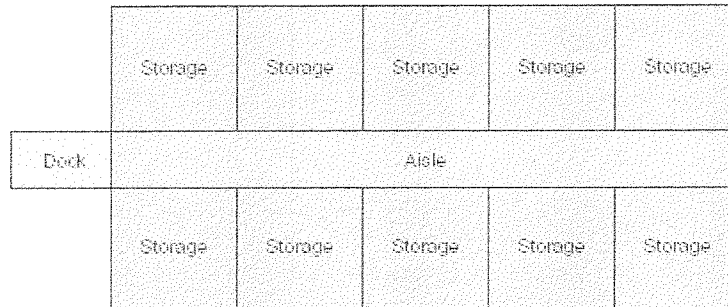
Question Attempts: 0 of 3 used

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Problem 8

David's Sport Supplies is a store that sells sports equipment and gear for teenagers and young adults. David's is in the process of assigning the location of storage areas in its warehouse to minimize the number of trips made to retrieve needed items.



Given in the table below are the departments that need to be located, the number of trips made per week for each department, and the area needed by each department.

Department	Trips to and from Dock	Area Needed
1. Baseball equipment	160	2
2. Football gear	100	1
3. Hockey equipment	150	3
4. Basketball equipment	120	1
5. Sports clothes	270	3

Which location scheme is the best?

☐	Dock	5	5	1	4	3
		5	2	1	3	3
☐	Dock	5	5	3	1	2
		5	3	3	1	4
☐	Dock	1	2	3	3	5
		1	4	3	5	5
☐	Dock	4	5	5	1	3
		2	5	1	3	3
☐	Dock	1	5	5	4	3
		1	5	2	3	3

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Problem 10

MMS Associates is a telecommunications service provider. The company is currently redesigning its main office to accommodate six newly hired salespeople. Some of the salespeople are expected to work in teams, so office assignments are very important. The table below presents the from-to matrix showing the expected frequency of contacts between members of the new sales staff.

Sales Person	A	B	C	D	E	F
A	—	6	12	18	1	1
B		—	4	19	3	0
C			—	5	0	0
D				—	7	19
E					—	0
F						—

This block plan shows the assigned office locations for the six sales members.

A	B	C
D	E	F

Michael Marc, the President of MMS Associates, is considering an alternative plan:

A	E	C
D	B	F

What is the *ld* score for this plan?

How does it compare to the original plan considered?

An alternative plan is