

Sample Computational Multiple Resource Model Computations

Simple 4-resource model (A,B,C,D)

Demand Vector for Primary Task

	A	B	C	D		Mean
Primary Task	1	2	0	3		1.5

Demand Vectors for Competing Secondary Tasks

	A	B	C	D		Mean
Secondary Task A	2	0	1	2		1.25
Secondary Task B	1	2	1	1		1.25

Exercise

Use the **Demand Vectors** listed above and the **Resource Conflict Model** on the pages that follow to calculate the Total Interference incurred during concurrent performance of (1) the Primary Task and Secondary Task A and (2) the Primary Task and Secondary Task B. Which multitasking scenario yields the greatest amount of dual-task interference according to your results?

	A	B	C	D		Mean
Task-1						
Task-2						

Total Demand = _____

(Max. = 6.0)

Resource Conflict Model

		A	B	C	D
A		0.8	0.6	0.4	0.2
B			0.8	0.6	0.4
C				0.8	0.3
D					0.8

Max. Conflict = 5.7

Conflict Summation = _____

Conflict scaling constant = Max. Demand/Max. Conflict = 6.0/5.7 = 1.05

Scaled Conflict = 1.05 * Conflict Summation = _____

Total Interference = Total Demand + scaled Conflict = _____

	A	B	C	D		Mean
Task-1						
Task-2						

Total Demand = _____

(Max. = 6.0)

Resource Conflict Model

		A	B	C	D
A		0.8	0.6	0.4	0.2
B			0.8	0.6	0.4
C				0.8	0.3
D					0.8

Max. Conflict = 5.7

Conflict Summation = _____

Conflict scaling constant = Max. Demand/Max. Conflict = $6.0/5.7 = 1.05$

Scaled Conflict = $1.05 * \text{Conflict Summation} = \underline{\hspace{2cm}}$

Total Interference = Total Demand + Scaled Conflict = _____