

Mars Chemicals manufactures five specialty chemical products. All five products uses same set of machines in manufacturing products. The details of machine hours required and profit statements are given below

Cost Structure of Specialty Chemicals

	Oxirane	Benzoate	Bromide	Theophylline	Dioxolan
Machine Hours Required	5	8	2	10	5
Selling Price per unit	5000	7000	2000	5000	4000
Variable Cost per unit	3600	5200	800	2500	3200
Allocated Fixed Cost per unit	600	960	240	1200	600
Total Cost	4200	6160	1040	3700	3800
Profit	800	840	960	1300	200
Minimum Requirement (units)	100	50	200	100	0
Maximum Requirement (units)	400	500	800	600	500

Total machine hour available is 8000 hours. Rank the products and work out most profitable product mix.