Ingredients	Component A	Component B
Octane	82	100
Cost	$ 41.00	$ 48.00
Quantity	40,000	27,000

Products	Regular	Premium
Min Octane	87	95
Selling Price	$ 50.00	$ 60.00
Orders	28,000	13,500

	Variable	Value	Components used	
X1	Component A used in Regular	34757	A	40000
X2	Component A used in Premium	5243	A	40000
X3	Component B used in Regular	13368	B	27000
X4	Component B used in Premium	13632	B	27000

Revenue = barrels of reg x price of reg + barrels of premium x price of premium

Revenue= $ 3,538,749.96

Cost = barrels of component A x cost of component A + barrels of component B X cost of component B

Cost = $ 2,936,000.00

Objective: Profit = Revenue - Cost $ 602,749.96

Constraints:

Standing Orders

barrels of regular ≥ orders for regular

barrels of premium ≥ orders for premium

Min Octane

octane of regular ≥ min octane for regular

octane of premium ≥ min octane for premium

Supplies

barrels of component A used ≤ barrels of component A on hand

barrels of component B used ≤ barrels of component B on hand

Non-negative

barrels of component A used ≥ 0

barrels of component B used ≥ 0

Product produced		Octane
reg	48125	87
prem	18875	95