

Product Mix Decision

A company manufactures three products. Each of these products use the same type of material but in different quantities. The unit selling prices, cost and profit details are as follows:

Product	X \$/unit	Y \$/unit	Z \$/unit
Selling price	23	26	28
Direct materials	6	8	6
Direct labour	8	6	8
Variable overhead	2	3	3
Fixed overhead	4	5	6
Profit	3	4	5

The direct material used on all three products costs \$10 per kg. The material available is expected to be limited to 600 kgs for the next accounting period. The maximum demand for each of the products during the next accounting period is expected to be as follows:

X 240 units Y 600 units Z 400 units

No inventories of finished products are held.

Required: Calculate the optimum product mix for the next accounting period.