

ACCA P3 Study Text

Chapter 14, Page 524, Section 12.2.4 Example: Scarce Resources

12.2.3 Efficient use of scarce resources

Usually output is restricted by level of demand, rather than by the organisation's ability to produce. However, sometimes there is a limit to the amount that can be produced due to a scarce (limiting) factor, such as labour, space or machinery.

The most profitable combination of products will occur where the **contribution per unit of the scarce factor** is maximised.

12.2.4 Example: Scarce resources

A business makes three different products, as follows:

Product	A	B	C
Selling price per unit (\$)	20	25	23
Variable cost per unit (\$)	10	8	12
Weekly demand (units)	25	20	30
Machine time per unit (hours)	4	3	4

Fixed costs are not affected by the choice of product because all three products use the same machine. Machine time is limited to 148 hours a week.

Which combination of products should be manufactured if the business is to produce the highest profit?

The selling prices in the example above in respect of Products A and B should be switched so that Product A has a selling price of \$25 and Product B has a selling price of \$20.