

Breakeven

marks

IGCSE Paper 1 2019

Breakeven Calculations Explained

Break even: the minimum level of units that must be sold for revenue to cover total costs exactly

The break even level of output = fixed costs/contribution per unit

Contribution per unit = selling price per unit – unit variable cost per unit

Example: if fixed costs are £10,000 and each unit contributes £10, then the break even output level = £10,000/£10= 1,000.

1,000 items must be sold for total costs to be covered and neither a profit or loss made

- 3 Sachin's business manufactures cricket bats for the mass market. He advertises in a national newspaper every two weeks. Demand for the cricket bats has rapidly increased since the business started two years ago. His 30 employees now produce 3 million cricket bats per year. A summary of costs and selling price is shown in Table 1. Sachin is finding it difficult to manage the business on his own. His friend has suggested delegating some tasks, such as marketing and production decisions, to employees.

Table 1: Summary of costs and selling price (\$)

Fixed costs per year (\$)	200 000
Variable cost per unit (\$)	4
Price per unit (\$)	20

- (d) Calculate break-even points for cricket bats (2 marks)

Solution

Contribution per unit = selling price per unit – unit variable costs

$$\$20 - \$4 = \$16 \text{ per unit}$$

Breakeven point = fixed costs/contribution per unit

$$200,000 / 16 = 12,500 \text{ cricket bats}$$
