

Unit 2: Finance for Business

Learning Aim B:

Understand how businesses plan for success

Topic B.1 Understand the planning tools businesses use to predict when they will start making a profit



B. Understand how businesses plan for success

Topic B.1 Understand the planning tools businesses use to predict when they will start making a profit

Learners should:

- . Define break-even: when a business has made enough money through product sales to cover the cost of making the product (no profit and no loss)
- . Understand from a break-even chart:
break even point – profit – loss - variable costs - fixed costs - total revenue - total costs -margin of safety
- . Calculate the break-even (formula will be given in the assessment)
- . Understand the advantages and disadvantages of break-even analysis to businesses when planning for success
- . Understand the effect on the break-even point if sales or (fixed and variable) costs change, and the impact of these changes on businesses.

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Break-even calculation

Revenue – Total costs

£10,000 - £10,000

Profit/Loss = 1
BREAK EVEN

Calculation

Need to know:

. how many products to sell to cover their costs: break-even

$$\text{Break even (BEP)} = \frac{\text{Fixed costs (FC)}}{\text{Selling price (SP)} - \text{Variable cost (VC)}}$$

How to calculate
Break Even Point



Two Teachers

Example:

Tied-up Ltd manufactures shoelaces.

Fixed costs = £50,000

Variable costs = £2.00 per pair

Shoelaces sell for £2.50 per pair

$$\text{Break even} = \frac{50000 \text{ (FC)}}{2.50 \text{ (SP)} - 0.50 \text{ (VC)}} = 33,333$$

Tied-up Ltd has to sell 33,333 pairs of laces to achieve the break even point

Margin of safety

The margin of safety is the difference between the number of units sold (planned or actual) and the break even point.

Example:

Tied-up Ltd sell on average 4000 laces per month, 48,000 per year therefore the margin of safety is:
48,000 – 33,333 = **14667**

A: Demonstrate the use of breakeven analysis in business

A.1 Calculating break-even

Break-even and its use for planning success

Understanding break-even point is an important tool when business planning.

Knowing the break even point can help assess the necessary sales revenue and whether this is obtainable or not.

Forecasts can be made about the likely effects of cost sales revenue and profits – variations will affect the business.

Without understanding the break even point a business has little idea if it will make a profit.

Any changes to the break even point of fixed and variable costs will affect the break even point, positively or negatively.

The margin of safety of the business is the reassurance that changes to cost or selling price may not immediately result in a loss.



Task 1

Calculate the break even points below.

Santa Plus make Christmas decorations.

Fixed costs are £30,000 per 100,000 decorations.

Variable costs are £2.50 per decoration.

£1.00 in labour, £0.50 in raw materials and £1.00

Selling price is £4.00.

How many decorations need to be sold to reach break even?

If the rent increases by £5,000 calculate the break even point

Now calculate the break even point if the decorations sell for £12.00

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Break-even charts

Sales volume (no. T shirts sold)	Variable cost (@£5 x sales)	Fixed costs	Total costs (fixed + variable)	Sales revenue (@£25 per T shirt x sales volume)
50	250	3000	3250	1250
100	500	3000	3500	2500
150	750	3000	3750	3750
200	1000	3000	4000	5000
250	1250	3000	4250	6250



Task 2

Label the lines of the graph and on the graph label four terms given.

Label the lines:

Sales revenue – Fixed costs – Variable costs

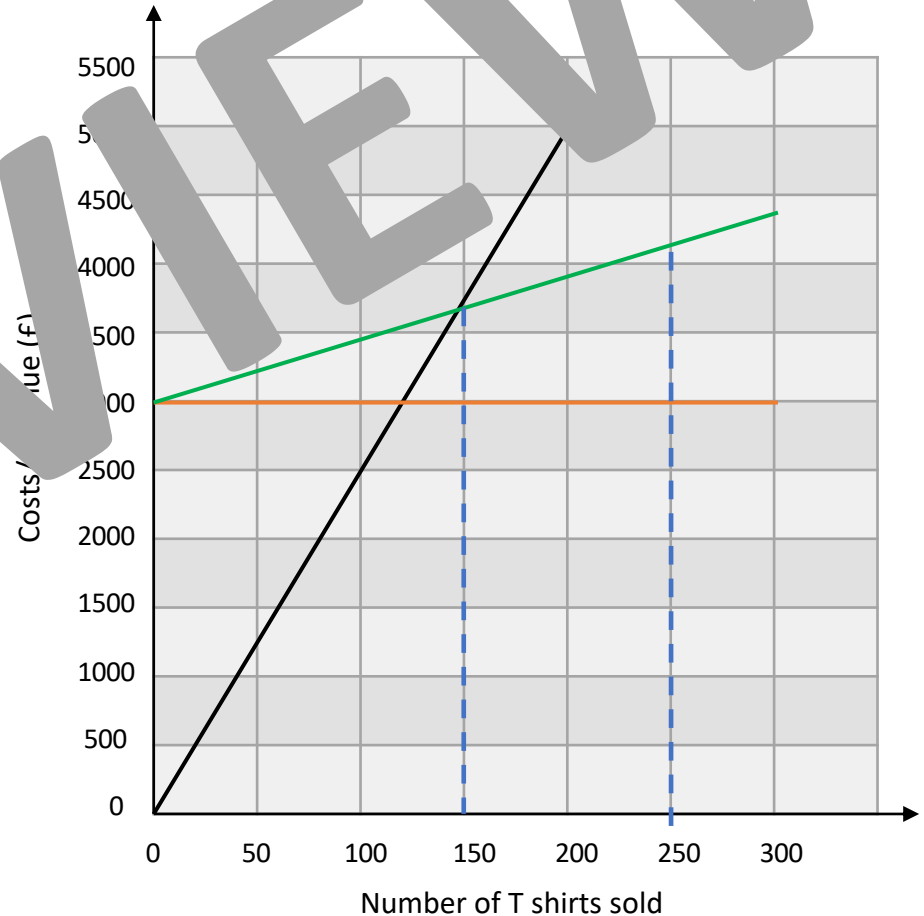


Label on the graph:

1. Break even point
2. Loss area
3. Profit area
4. Margin of safety

Capital Ts are a T shirt manufacturer.

The table shows the sales of T shirts at cost and sale price of £25 + fixed and variable costs.



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Changes in break-even point

Break-even

- . changes in revenue, costs etc affect break-even point

Changes

- . **Price rise – rise in revenue:** decrease BEP increase profits
- . **Less sales - fall in revenue:** increase BEP
- . **Rise in variable costs:** increase BEP
- . **Fall in fixed costs:** decrease BEP

Break-even analysis + disadvantages

Advantages

Costs

- . Know both fixed and variable costs

Predict

- . predict what you need now and in the future
- . be able to make profit

Changes

- . assess any changes impacting break-even (prices/costs etc)

Disadvantages:

Price variation

- . prices not always the fixed (same)- discounts etc

All products not sold

- . not everything produced is sold

Simplification

- . assumes things are a constant

PREVIEW

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Task 3

Read each statement and decide if it TRUE or FALSE

	Statement	True	False
1	The margin of safety is the difference between the number of units sold and the break even point.		
2	Fixed costs include rent		
3	All business have to calculate break even point by law, because they are trading		
4	One advantage of using break even is that it helps to predict the future		
5	The margin of safety always stays the same		
6	One weakness of break even point is it assumes all prices are fixed		
7	Without understanding the break even point a business has little idea if it will make a profit.		
8	Understanding break even point is an important tool when business planning.		
9	Sales discounts don't change the break even point		
10	Fall in fixed costs improves profits		

