

LO2

Or if you prefer a formula...

Total Costs = Fixed Costs + (Variable Cost x Output) ...for 1

Tip: If you divide this total costs value by the output, you get **total cost per unit!**

To calculate **Total Costs...**

- Work out the **variable cost** for one unit (product).
- Multiply this by **output** (number of products made/sold).
- Add the total fixed costs to this number (once).



Variable costs are the costs that **change** depending on how many products a business makes/sells.

Examples of **variable costs** include...

- Raw materials
- Components (parts)
- Stock
- Packaging



Examples of **fixed costs** include...

- Rent
- Loan payments
- Insurance
- Salaries
- Utilities (gas etc.)
- Advertising

Fixed costs are the costs that **stay the same** no matter how many products a business produces/sells.

So, if a business sells 1000 products for £1.50 each, their **revenue** is £1,500 (1000 x 1.50).

Revenue is calculated by...

Number Sold x Selling Price

Revenue is the name given to the amount of money the business makes from selling products. It's not profit.



Total Costs are the fixed and variable costs added together.

Costs are the things businesses have to pay for in order to operate. These costs can be grouped as **fixed** or **variable**.

Profit is the name given to the money left over from revenue after all costs have been paid.

Break-even is the term given to the point at which a business has covered its costs, but is not yet making a profit. It is the point where the business no longer makes a loss, but does not yet make a profit either.

Total Profit is calculated by...

Total Revenue - Total Costs

Profit per unit is the profit made for each product sold. This can be calculated by...

Selling Price - Total Cost per Unit

(or you could calculate total revenue, take off total costs and divide your answer by output!)

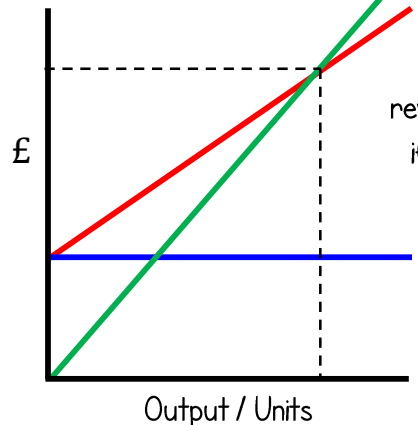
The point where **red** and **green cross** is the break-even point.

The **blue line** shows fixed costs - it's always a straight line because they don't change!

Break-even can also be displayed/calculated using a graph.

The **red line** shows total costs, this starts at the top of the fixed costs line.

A business's **break-even point** can be calculated using this formula...



The **green line** shows total revenue. It always starts at 0; if you sell nothing, you make nothing!

$$\frac{\text{Fixed Costs}}{\text{Selling Price} - \text{Variable Cost per Unit}}$$

So if a business has fixed costs of £4000, sells products for £2.50 and each product costs £0.50 to make, their break-even point would be calculated like this...

$$\frac{4000}{2.50 - 0.50} = \frac{4000}{2.00} = 2000$$

This business needs to sell **2000 products** to break-even.