**Activity – Shoes Direct**

1. You are required to calculate the breakeven point for the example below and express this on a graph.
2. What is the margin of safety for shoes direct – Express on the graph.

**Shoes direct Neath**

**The costs he has researched are as follows:**

Insurance and road tax £600 per month;

Utility bills - £1,000 per month

Average cost of each item £10.00;

Salaries - £1,400 per month;

loan repayment £750 per month for twelve months.

Rent for the shop - £1,250 per month

Expected sales : £20,000

His market research indicates that each item will have an average sales price of £15.00.

**Break-even output = Fixed costs**

 **Contribution per unit.**

**Contribution per unit = Selling price – Variable costs (per unit)**

**Activity shoes direct – Answers**

**Fixed costs**

Insurance and road tax £600 per month;

Utility bills - £1,000 per month

Salaries - £1,400 per month;

loan repayment £750 per month for twelve months.

Rent for the shop - £1,250 per month

**Total fixed costs - £5,000**

**Variable costs**

Average cost of each item £10.00;

**Total Variable costs - £10.00 per item**

**Sales revenue**

£15 per item

**Break-even output = Fixed costs**

 **Contribution per unit.**

**Contribution per unit = Selling price – Variable costs (per unit)**

Break even in units = £5,000

 £15 - £10

Break even in units = £5,000 / 5

**Break even in units = 1,000 items**

**Break even graph calculations**

**Fixed costs**

Plot horizontal on graph

£5,000

**Variable costs**

Plot vertical on graph

**Number of units x variable costs = Variable cost per number of units**

Point 1 – Zero

Point 2 - 1,000 = 1,000 x 5 = 5,000

Point 3 – 2,000 = 2,000 x 5 = 10,000

**Total costs**

Plot vertical on graph

**Total costs = Fixed costs + variable costs at selected number of units**

Point 1 – Fixed costs

Point 2 – Units – 1,000 = 5,000 + (1,000 x 5) = £10,00

Point 3 – Units – 2,000 = 5,000 + (2,000 x 5) = £15,000

**Revenue**

Plot vertical on graph – Why?

**Revenue = quantity sold x selling price**

Point 1 – Zero

Point 2 - 1,000 x 15 = £15,000

Point 3 – 2,000 x 15 = £30,000

**Breakeven point**

Where profit line and total costs line intersect.