**Activity – Claire’s Hairdressers**

1. You are required to calculate the breakeven point for the example below and express this on a graph (10)

**Claire’s hairdressers**

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

Insurance and road tax £450 per month;

Van rental - £500 per month,

Utility bills - £1,000 per month

Average cost of each item £5.00;

Salaries - £1,800 per month;

loan repayment £1,000 per month for twelve months.

Rent for the shop - £750 per month

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 Claire’s hairdressers – Answers**

**Fixed costs**

Insurance and road tax £450 per month;

Van rental - £500 per month,

Utility bills - £1,000 per month

Salaries - £1,800 per month;

loan repayment £1,000 per month for twelve months.

Rent for the shop - £750 per month

**Total fixed costs - £5,500**

**Variable costs**

Average cost of each item £10.00;

**Total Variable costs - £5.00 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 = £5,500

 £15 - £5

Break even in units = £5,500 / 10

**Break even in units = 550 items**

**Break even graph calculations**

**Fixed costs**

Plot horizontal on graph

£5,500

**Variable costs**

Plot vertical on graph

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

Point 1 – Zero

Point 2 - 800 = 800 x 5 = 8,000

Point 3 – 1,200 = 1,200 x 5 = 12,000

**Total costs**

Plot vertical on graph

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

Point 1 – Fixed costs

Point 2 – Units – 800 = 5,500 + (800 x 5) = £9,500

Point 3 – Units – 1,200 = 5,500 + (1,200 x 5) = £11,500

**Revenue**

Plot vertical on graph – Why?

**Revenue = quantity sold x selling price**

Point 1 – Zero

Point 2 - 800 x 15 = £12,000

Point 3 – 1,200 x 15 = £18,000

**Breakeven point**

Where profit line and total costs line intersect.