## Luke's Candle Shop Exercise - Break-even Analysis

## Question 1

- a) Identify the formula to calculate the break-even point of sales for a firm.
- b) Study the information for Luke's Candle Shop below.

Weekly Costs and Revenue	
Selling price = \$4.00 per candle	Packaging = 15 cents per candle
Wax = 50 cents per candle	Rent = \$200 per week
Wicker = 35 cents per candle	Machinery = \$100 per week

- i) Identify the price of each candle.
- ii) Calculate the total variable cost for each candle.
- iii) Calculate the total fixed costs for this firm.
- iv) Calculate the break-even point for Luke's Candle Shop.
- v) Calculate the break-even point if Luke's Candle Shop:
  - Increased the price to \$7.00 per candle
  - Decreased price to \$3.00 per candle
  - Increased variable costs to \$1.30 a candle
  - Dropped their fixed costs to \$250 per week.

## Question 2

Complete the table below using the figures from Question 1.

Luke's Candle Shop						
Quantity sold	50	100	150	200	250	300
Total revenue (TR)						
(price x quantity)						
Fixed costs	300	300	300	300	300	300
Variable costs						
Total costs (TC)						
Profit (TR-TC)						

## **Question 3**

Graph the information from the table.

