Excel Solution

Zoho Enterprises makes genuine leather jackets. The variable costs to make each jacket are $90.
Fixed costs for the period are $3900. The selling price is $150 per jacket.
The factory's production capacity for the period is 100 jackets.

Prepare a break-even chart to find the break-even point
   (i)   in units
      (ii)   in dollars

Identify on your graph the profit and loss areas.

- In cell A1 type the heading "Quantity, Q"

- In cell B1 type the heading "Total Revenue, TR"

- In cell C1 type the heading "Total Cost, TC"

- In cell A2 key in the Q value of 0, as it is the minimum possible quantity produced.

- In cell A3 key in the Q value of 10. Use an increment of $100 \div 10 = 10$.

- Highlight cells A2:A3 and copy the sequence down to cells A4:A12 to reach the maximum Q value of 100.

- In cell B2 type the formula for TR: $= 150*A2$. The answer zero should be displayed in B2.

- Copy B2 down to cover B3:B12.

- In C2 type the formula for the TC: $= 90*A2 + 3900$ and press enter. The value 3900 should be displayed in C2.

- Copy the formula from C2 down to C3:C12.

- Your table should like this:

Quantity, Q	Total Revenue, TR	Total Cost, TC
0	0	3900
10	1500	4800
20	3000	5700
30	4500	6600
40	6000	7500
50	7500	8400
60	9000	9300
70	10500	10200
80	12000	11100
90	13500	12000
100	15000	12900

- Highlight the full range A1:C12.

- Click on the **chart wizard** button.

- Choose the **XY Scatter** graph option 2
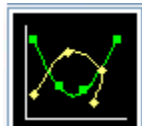
- Press **Next** tab twice.

- Choose the **Legend** tab. Make sure that the **Show Legend** is selected. We must be able to tell the difference between the two lines.

- Choose the **Gridlines** tab. Show major gridlines. We are reading the break-even values off the graph.

- Choose the **Titles** tab. Add the titles for the *x*-axis and the *y*-axis as shown in the finished graph.

- Press on the **Next** tab.

- Choose **As New Sheet** button.

- Right click anywhere inside the graph. Choose **Format Plot Area** and choose the option **None** under **Area**.

- Right click on any of the *x*-axis numbers (Quantity). Choose **Scale** tab and change **Maximum** value from 120 to 100 and **Major unit** from 20 to 10.

- Type in the labels for the profit, loss and break even point in units and in dollars.

- Your finished graph should like this:

Example 1
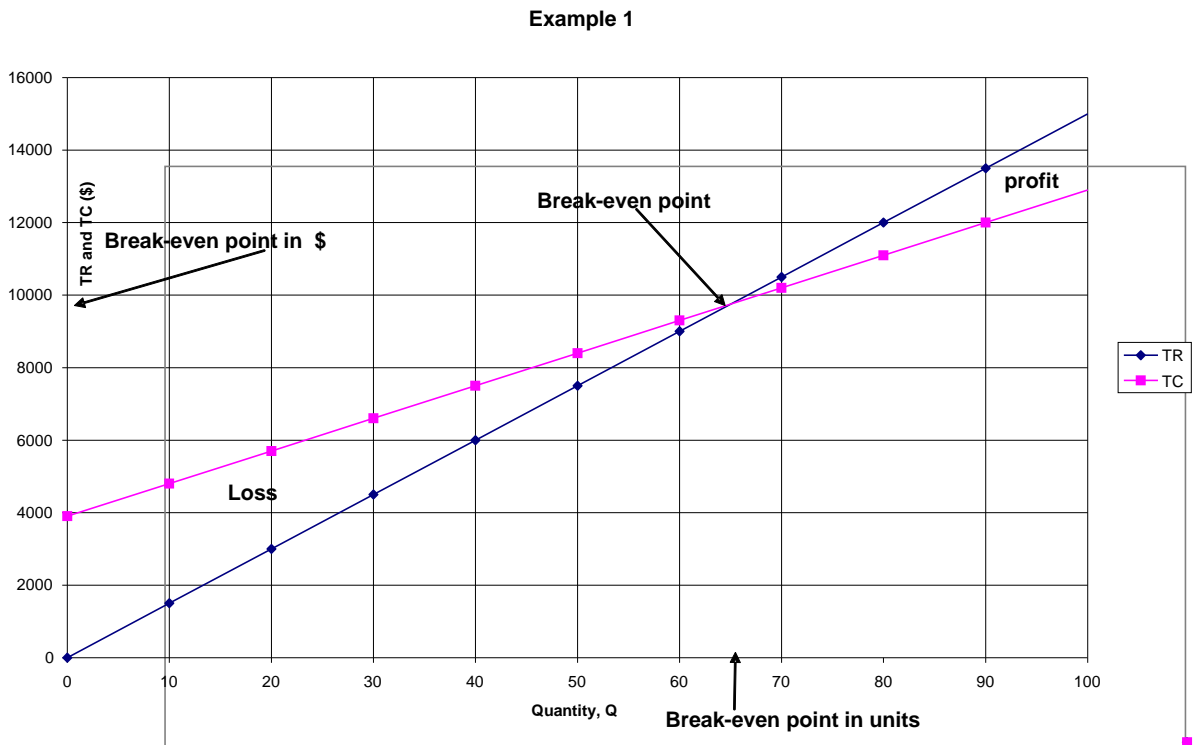
The break-even point in units is 65 and in dollars it slightly less than 10000.