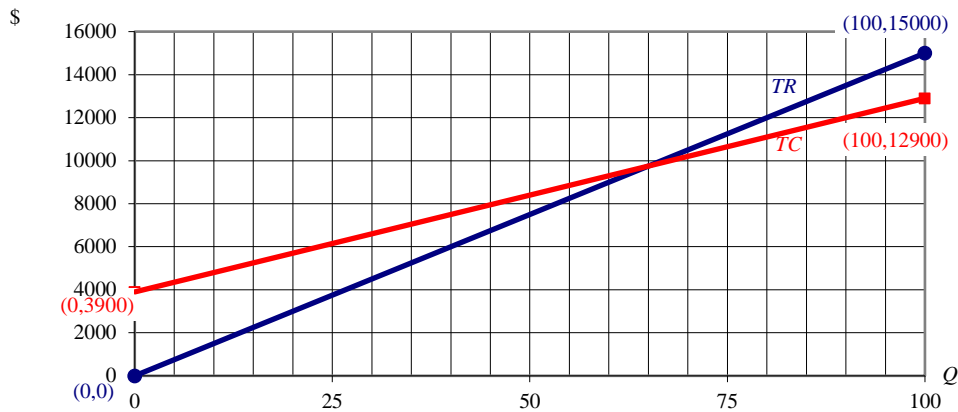


Exercise: Break-even analysis

From the break-even chart, we can read the following information:



- The break-even point is the point at which the lines cross (intersect).
- The vertical line from this point to the horizontal axis gives the break-even point in units. When Zoho company makes 65 jackets per period, they will break even.

$$TR = TC \Rightarrow NI = 0$$

- The horizontal line to the vertical axis gives the break-even point in dollars.
- Zoho company will have total revenue of \$9750, when they break even. We can also get this figure by calculating TR at the break-even point in units, where $Q = 65$.

$$TR = 150Q = (150) \times 65 = \$9750$$

- At break-even point we know that $TR = TC$. So the total costs are also Dh 9750. We can also get the total costs by calculating TC at the break-even point in units, where $Q = 65$.

$$TC = TVC + FC \Rightarrow TC = 90Q + 3900 = (90)(65) + 3900 = 5850 + 3900 = \$9750$$

- Zoho company will make a loss, when they make less than 65 jackets.
- Zoho company will make a profit, when they make more than 65 jackets.
- Both lines end at $Q = 100$ line which is the capacity per period for Zoho company. They can't make more than 100 jackets for the period.
- When 0 units are made, the total cost is \$3900. This is also the amount for fixed costs (FC). Fixed costs are \$3900 for the period whether Zoho company make zero, sixty-five, or a hundred jackets.

We can answer these questions using a break-even chart:

