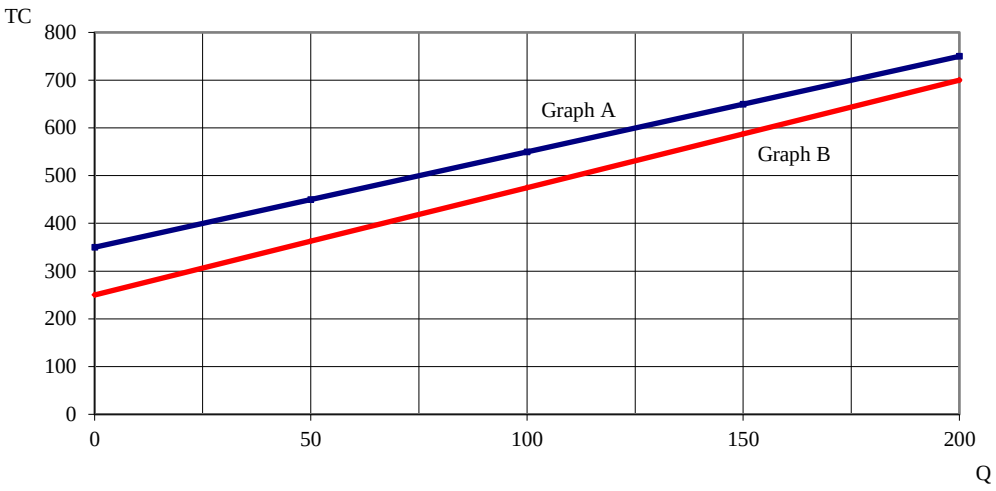
Exercise: Total Cost Graph

Two total cost graphs, Graph A and Graph B, are shown below. In each case, the capacity for the period is 200 units.



(a) Graph B has a steeper slope than Graph A. This indicates a greater unit variable costs.

We know that the slope of the total cost line gives the unit variable costs.

Graph A: $a = \frac{y_2 - y_1}{x_2 - x_1} = \frac{750 - 350}{200 - 0} = \frac{400}{200} = 2$

The unit variable costs for Graph A are Dh 2.

Graph B: $a = \frac{y_2 - y_1}{x_2 - x_1} = \frac{700 - 250}{200 - 0} = \frac{450}{200} = 2.25$

The unit variable costs for Graph B are Dh 2.25.

(b) The fixed costs for Graph A are Dh 350.

The fixed costs for Graph B are Dh 250.

(c) The total cost equation for Graph A is $TC = 2Q + 350$.

The total cost equation for Graph B is $TC = 2.25Q + 250$.