

### Exercise: Change in Variable Cost

The variable cost of a certain unit is Dh 30. The selling price of the unit is Dh 60. The capacity for the period is 200, and the fixed costs are Dh 3000.

Find the break-even point if the unit variable costs increase by Dh 10.

The new unit variable cost is  $30 + 10 = \text{Dh } 40$ .

The total revenue equation is  $TR = 60Q$ .

The new total cost equation is  $TC_2 = 40Q + 3000$ .

At the break-even point,

$$TR = TC \Rightarrow 60Q = 40Q + 3000 \Rightarrow 20Q = 3000 \Rightarrow Q = 150 \text{ units}$$

In dirhams, the break-even point is Dh 9000.



