Recall: *C(q)* = Cost to produce quantity *q* items

Marginal Cost is the cost to produce one more item. In other words, Marginal Cost is the *rate of change* of Cost.

$MC(q) = C(q+1) – C(q)$

Improved definition of Marginal Cost:

Improved definition of Marginal Revenue:

Improved definition of Marginal Profit:

Example: Suppose that $C(q)$ represents the cost to produce $q$ pizzas in dollars. $C\left(15\right)=40$ means that the cost to produce 15 pizzas is $40. Suppose also that $C^{'}\left(15\right)=2$. Find $C(16)$.