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. $C(15) = 40$ means that the cost to produce 15 pizzas is \$40. Suppose also that $C'(15) = 2$. Find $C(16)$.