

MATH 11x

let p represent price measured in \$/unit

let q represent quantity (this may be called quantity demanded, or produced or sold) and may be in number of units or widgets or some other way to know how many there are.

Total Cost = Fixed Cost + Variable Cost

$$TC(q) = FC + VC$$

Total Revenue = price * quantity

$$TR(q) = p * q$$

Total Profit = Total Revenue - Total Cost

$$\pi(q) = TR(q) - TC(q)$$

We usually use algebra to simplify $\pi(q)$.