





Measures of Labor Productivity

Marginal product (MP): Worker's
Contribution to Total Product

Total product (TP): Total units
produced by ALL workers

Average product (AP): Output
per worker



Sum of MIP



$$\frac{\text{Change in TP}}{\text{Change in L}}$$

$$TP(L=n) = MP_1 + MP_2 + MP_3 + MP_4 + \dots + MP_n$$

$$AP = \frac{TP}{L}$$

$$MP = \frac{\Delta T P}{\Delta L}$$

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Total product (TP): Total units produced by ALL workers  Sum of MP

$$TP (L=n) = MP_1 + MP_2 + MP_3 + MP_4 + \dots + MP_n$$

Marginal product (MP): Worker's Contribution to Total Product  $\frac{\text{Change in TP}}{\text{Change in L}}$

$$MP = \frac{\Delta TP}{\Delta L}$$

Average product (AP): Output per worker

$$AP = \frac{TP}{L}$$

Using the Total Product (TP) to calculate the Marginal Product (MP)