

SOME FORMULAS

$$R(q) = q \cdot D(q)$$

$$P(q) = R(q) - C(q)$$

$$\int_a^b f(x) dx$$

$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\Delta x = \frac{b - a}{n}$$

$$y = mx + b$$

$$f'(a) = \lim_{h \rightarrow 0} \frac{f(a+h) - f(a-h)}{2h}$$

$$y = f'(a)(x - a) + f(a)$$

$$\text{If } f(x) = x^n \text{ then } f'(x) = n \cdot x^{n-1}$$

$$\text{midpoint} = \frac{x_i + x_{i+1}}{2}$$

$$\text{If } f(x) = a^x \text{ then } f'(x) = \ln a \cdot a^x$$

$$S_n(f, [a, b]) = \sum_i f(x_i) \Delta x$$