

Information Sheet

$$\sum_{i=1}^n 1 = n$$

$$\sum_{i=1}^n i = \frac{n(n+1)}{2}$$

$$\sum_{i=1}^n i^2 = \frac{n(n+1)(2n+1)}{6}$$

$$\sum_{i=1}^n i^3 = \frac{n^2(n+1)^2}{4}$$

$$\int_a^b f(x) dx \approx \frac{\Delta x}{2} [f(x_0) + 2f(x_1) + 2f(x_2) + \dots + 2f(x_{n-1}) + f(x_n)]$$

$$\int_a^b f(x) dx \approx \frac{\Delta x}{3} [f(x_0) + 4f(x_1) + 2f(x_2) + 4f(x_3) + 2f(x_4) + \dots + 4f(x_{n-1}) + f(x_n)]$$

$$CS = \int_0^{\bar{x}} D(x) dx - \bar{p}\bar{x}$$

$$PS = \bar{p}\bar{x} - \int_0^{\bar{x}} S(x) dx$$

$$A = e^{rT} \int_0^T R(t) e^{-rt} dt$$

$$PV = \int_0^T R(t) e^{-rt} dt$$

$$A = \frac{mP}{r} (e^{rT} - 1)$$

$$PV = \frac{mP}{r} (1 - e^{-rT})$$

$$L = 2 \int_0^1 [x - f(x)] dx$$

$$T_n(x) = f(a) + f'(a)(x-a) + \frac{f''(a)}{2!}(x-a)^2 + \dots + \frac{f^{(n)}(a)}{n!}(x-a)^n$$