

Numerical Methods for Integration

Trapezoidal Rule

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

RRAM (Right-hand Rect. Approx.)

LRAM (Left-hand Rect. Approx)

MRAM (Midpt. Rect. Approx)