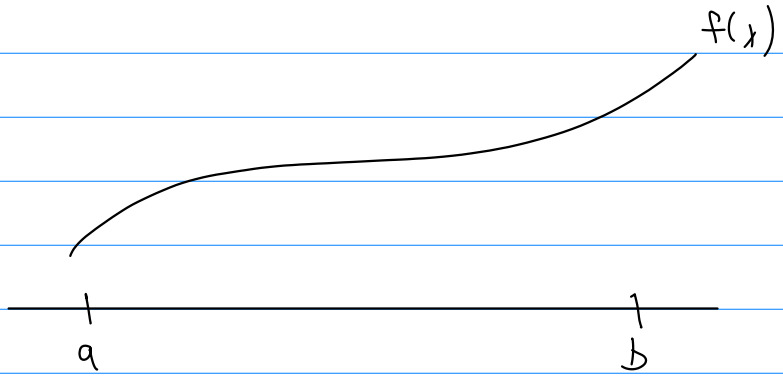
Simpson's Rule

Approximate $f(x)$, $x \in [a, b]$ as a function



Use $x_1 =$ $x_2 =$ $x_3 =$ $h =$

Recall the Lagrange Interpolant:

$f(x) \approx$

Then $\int_a^b f(x) \approx$

$\Rightarrow x_1 =$ $\omega_1 =$ $=$

$x_2 =$ $\omega_2 =$ $=$

$x_3 =$ $\omega_3 =$ $=$

Local Error: $e =$

Global Error: $E =$