

## Left Riemann sum

created by Thijs van den Berg

$$\int_a^b f(x)dx \approx h \sum_{i=0}^{n-1} f(a + ih), \quad h = \frac{b-a}{n}$$

The left Riemann sum integrated a function by partitioning the interval [a,b] in n subintervals. The area in each interval is approximated with a rectangle whose height is the function height at the left part of that interval.

### Symbol list:

n      Number of subintervals  
 $f(x)$       Function that is integrated