



MTH 201 -- Calculus

Module 10B: Riemann Sums

November 16-17, 2020

**Placeholder for review -- wait
and see what happens on DP**

Desmos activity on computing small Riemann sums

Go to student.desmos.com

Should be visible

If not, use the link for your section in the class links

Suppose we want to find the distance traveled by an object whose velocity $v(t)$ is given, on the time interval $[1, 5]$. If we were to do this by calculating M_5 , the width Δt of each rectangle would be

$$\Delta t = 0.6$$

$$\Delta t = 0.8$$

$$\Delta t = 1$$

$$\Delta t = 5$$

The Δt value would be different for each rectangle



To 0

Suppose we want to find the distance traveled by an object whose velocity $v(t)$ is given, on the time interval $[1, 5]$. If we were to do this by calculating M_5 , the height of the first (leftmost) rectangle would be

1.4

1.8

$v(1)$

$v(1.4)$

$v(1.8)$



To

0

Suppose we want to find the distance traveled by an object whose velocity $v(t)$ is given, on the time interval $[1, 5]$.

Then M_5 would equal

$$v(1) + v(2) + v(3) + v(4) + v(5)$$

$$v(1.4) + v(2.2) + v(3) + v(3.8) + v(4.2)$$

$$v(1.4)(0.8) + v(2.4)(0.8) + v(3.4)(0.8) + v(4.4)(0.8)$$

$$v(1)(0.8) + v(2)(0.8) + v(3)(0.8) + v(4)(0.8) + v(5)(0.8)$$

$$v(1.4)(0.8) + v(2.2)(0.8) + v(3)(0.8) + v(3.8)(0.8) + v(4.2)(0.8)$$

None of these



To 0