

Round all responses to 3 decimal places as appropriate.

▼ Question 1

A particle's velocity is modeled by the equation $v(t) = t^3 - t^2 - 4t + 4$.

Find the maximum velocity of the particle between $t = 0$ and $t = 2$ seconds.

► **Solution**

▼ Question 2

How far does the particle travel between $t = 0$ and $t = 4$?

► **Solution**

▼ Question 3

Find the area of the region bounded $y = 5$ and $y = 2x^2$

► **Solution**

▼ Question 4

The function $y = 4$ is rotated around the x -axis. Find the volume of the solid if the height is 3 units.

► **Solution**