

# How to Prove Concavity for a Graph

Giannacco

$$v(t) = -3 + 8e^{-250t}$$

Find the first derivative, if it is less than zero, it is decreasing.

$$v'(t) = -2000e^{-250t}$$

Find the second derivative, if it is positive, it is concave up, if it is negative, it is concave down.

$$v''(t) = 500000e^{-250t}$$