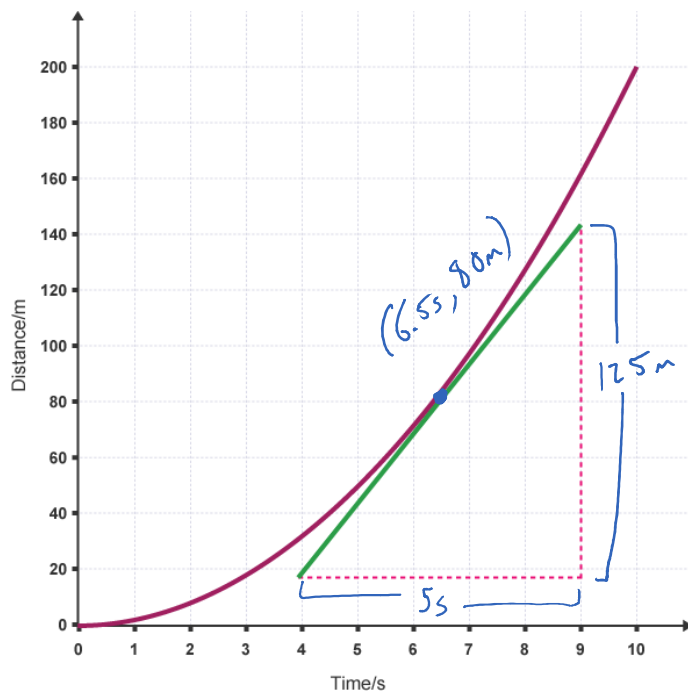


Distance vs. Time Graph

February 8, 2017 10:31 AM



Tangent

A straight line that just touches the curve at one point.

The slope of the Tangent for a distance vs. Time graph is the instantaneous velocity.

-The velocity of the object at that time and location

The slope of the Tangent for a Velocity vs. Time graph is the instantaneous acceleration.

-The acceleration of the object at that time and location

$$\text{Slope} = \frac{\text{rise}}{\text{run}} = \frac{125\text{m}}{5\text{s}} = \underline{\underline{25\text{m/s}}}$$

at $t = 6.5\text{sec}$ and at 80m our
object is travelling at 25m/s