

Formative Assessment #15 – Applications of Higher Order Derivatives


Due Date: _____

Completed: _____

C3.5: I can solve problems involving higher order derivatives (position, velocity and acceleration).

1. Consider the position function $s(t) = \frac{t^3 - 12t}{4}$. Determine the velocity and acceleration functions.

2. The function $s(t) = -4.9t^2 + 49t + 15$ gives the height in meters of an object after it is thrown vertically upward from a point 15 meters above the ground at a velocity of 49 m/s. What is the object's maximum height? *Round your answer to the nearest tenth of a meter.*

Code(s)	Learning Categories							 Assessed by:
C3.5	1.	EH	EL	AH	AL	NH	NL	
	2.	EH	EL	AH	AL	NH	NL	
Notes								