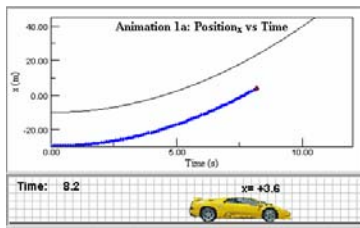
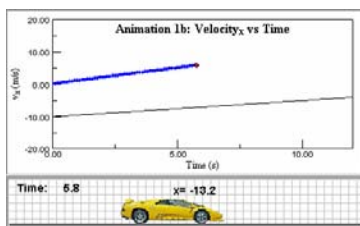


## Worksheet for Exploration 2.5: Determine $x(t)$ and $v(t)$ of the Lamborghini



a. Find the position of the toy Lamborghini as a function of time,  $x(t)$ , for each animation (**position is given in centimeters and time is given in seconds**). [Restart](#). Note that the graph depicts the position as a function of time. Use the "check function" button to see the actual position vs. time graph and use this as a guide for your analysis.

	Initial position	Initial Velocity	Acceleration
1a			
2a			
3a			
4a			



b. Find the velocity of the toy Lamborghini as a function of time,  $v(t)$ , for each animation (**position is given in centimeters and time is given in seconds**). Use the "check function" button to see the actual velocity vs. time graph and use this as a guide for your analysis. (If you have taken calculus, this exercise should be particularly straightforward.)

	Initial Velocity	Acceleration
1b		
2b		
3b		
4b		