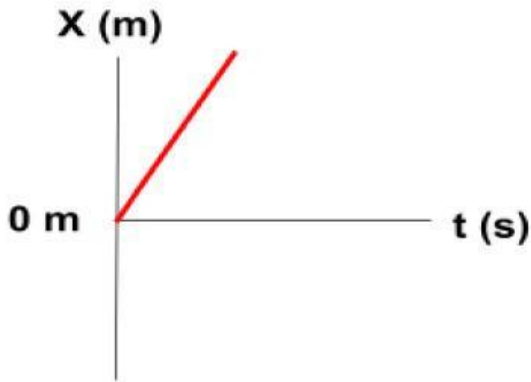
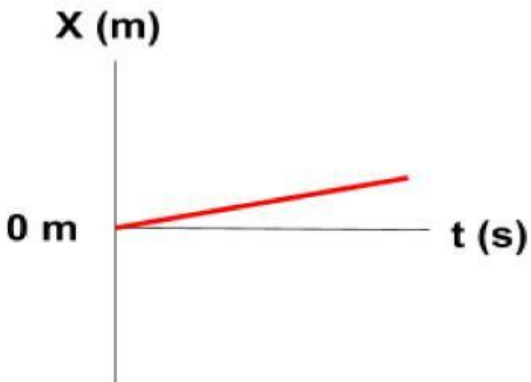
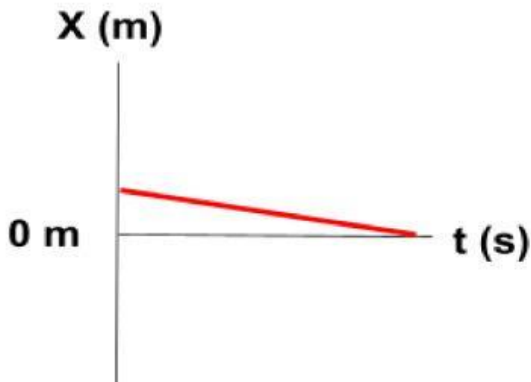
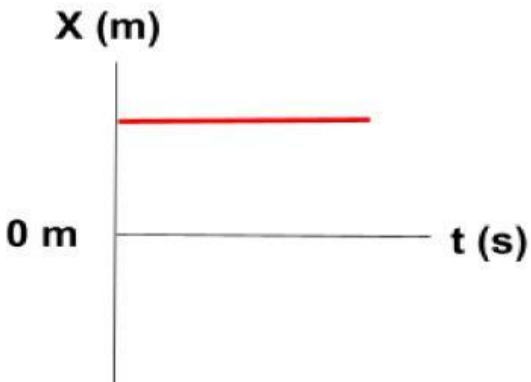
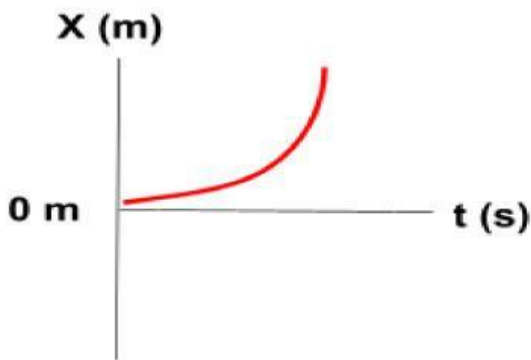
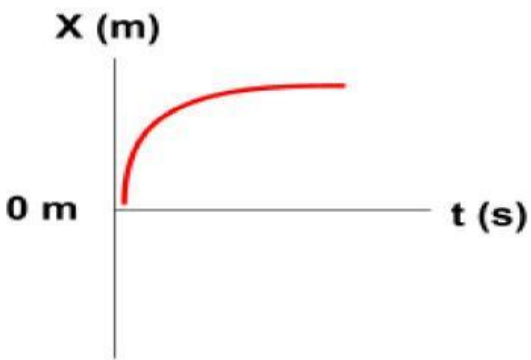
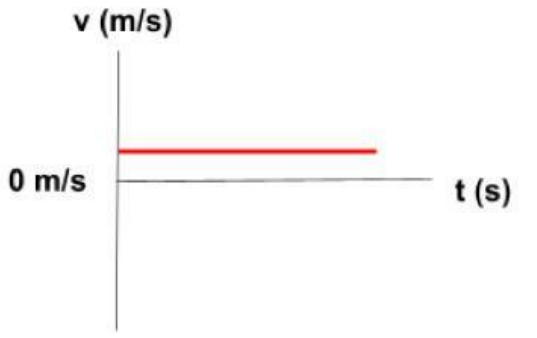
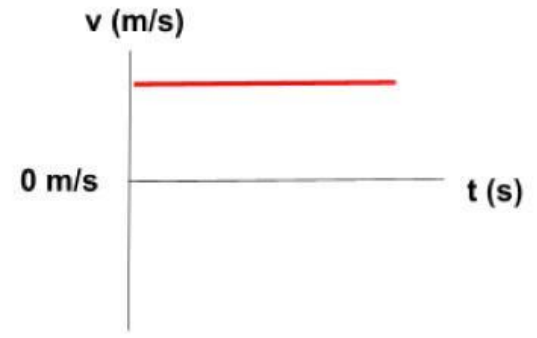
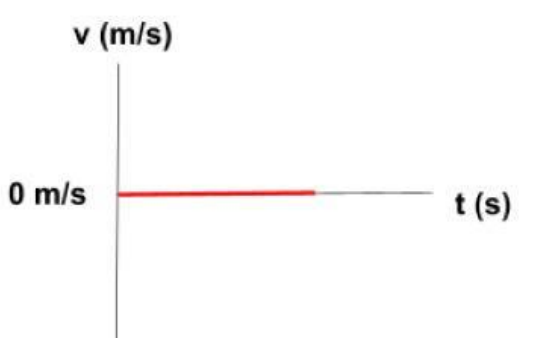
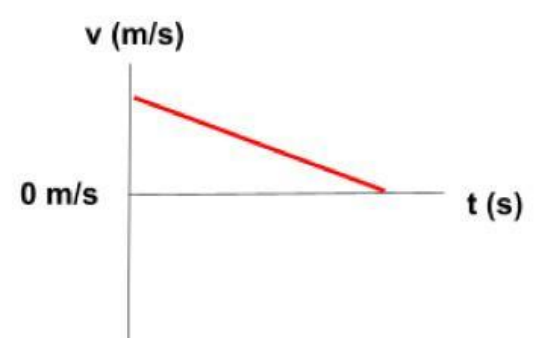
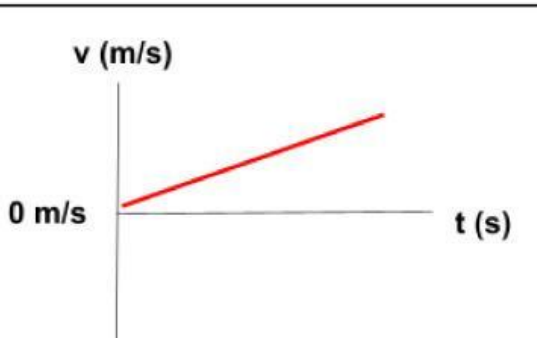
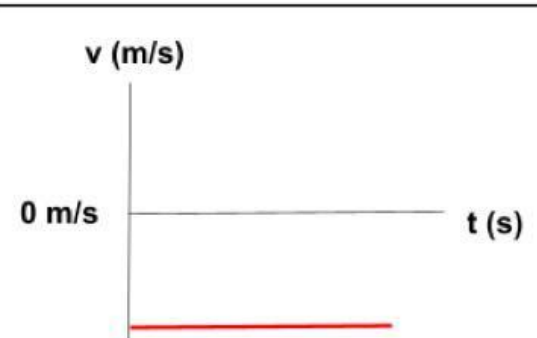


For each position vs. time graph shown, describe how an object would have to move to generate this graph. The positive direction is to the right.

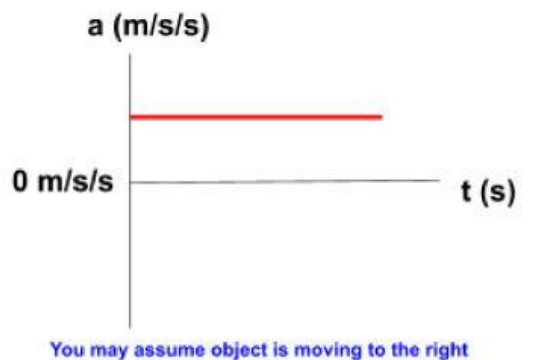
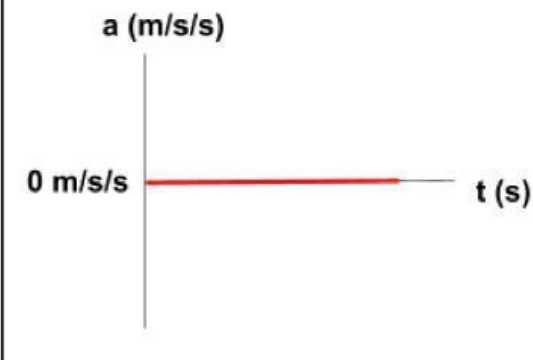
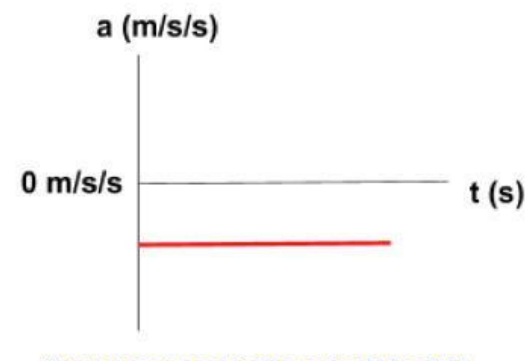
 <p>A position vs. time graph with position X (m) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m. A straight red line starts at the origin and extends into the first quadrant with a steep positive slope.</p>	 <p>A position vs. time graph with position X (m) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m. A straight red line starts at the origin and extends into the first quadrant with a shallow positive slope.</p>
 <p>A position vs. time graph with position X (m) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m. A straight red line starts at a positive position on the vertical axis and extends with a negative slope until it reaches the horizontal axis.</p>	 <p>A position vs. time graph with position X (m) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m. A horizontal red line is drawn at a constant positive position value.</p>
 <p>A position vs. time graph with position X (m) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m. A red curve starts at the origin and curves upwards with an increasing positive slope.</p>	 <p>A position vs. time graph with position X (m) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m. A red curve starts at the origin and curves upwards with a decreasing positive slope, approaching a horizontal asymptote.</p>

For each velocity vs. time graph shown, describe how an object would have to move to generate this graph. The positive direction is to the right and the t axis starts at 0 m/s.

 <p>A velocity vs. time graph with velocity v (m/s) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m/s. A horizontal red line is drawn at a constant positive velocity value above the zero line.</p>	 <p>A velocity vs. time graph with velocity v (m/s) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m/s. A horizontal red line is drawn at a constant positive velocity value above the zero line.</p>
 <p>A velocity vs. time graph with velocity v (m/s) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m/s. A horizontal red line is drawn at a constant positive velocity value above the zero line.</p>	 <p>A velocity vs. time graph with velocity v (m/s) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m/s. A red line starts at a positive velocity value on the vertical axis and slopes downward linearly until it reaches the zero velocity line on the horizontal axis.</p>
 <p>A velocity vs. time graph with velocity v (m/s) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m/s. A red line starts at the origin (0,0) and slopes upward linearly with a constant positive slope.</p>	 <p>A velocity vs. time graph with velocity v (m/s) on the vertical axis and time t (s) on the horizontal axis. The origin is marked 0 m/s. A horizontal red line is drawn at a constant negative velocity value below the zero line.</p>

For each acceleration vs. time graph, you may assume that the object is either moving in the positive direction or is stationary.

For each acceleration vs. time graph shown, describe how an object would have to move to generate this graph.

 <p style="text-align: center;">$a \text{ (m/s/s)}$</p> <p style="text-align: center;">0 m/s/s</p> <p style="text-align: right;">$t \text{ (s)}$</p> <p style="color: blue; font-size: small;">You may assume object is moving to the right</p>	 <p style="text-align: center;">$a \text{ (m/s/s)}$</p> <p style="text-align: center;">0 m/s/s</p> <p style="text-align: right;">$t \text{ (s)}$</p>
 <p style="text-align: center;">$a \text{ (m/s/s)}$</p> <p style="text-align: center;">0 m/s/s</p> <p style="text-align: right;">$t \text{ (s)}$</p> <p style="color: blue; font-size: small;">You may assume object is moving to the right</p>	

What does the area under an acceleration vs. time graph show?

What does the area under a velocity vs. time graph show?

What does the slope of a position vs. time graph show?

What does the slope of a velocity vs. time graph show?