YOUR GRADE IS BASED ON THE PROCESS AS WELL AS THE FINAL RESULT. SHOW ALL
YOUR STEPS CLEARLY SO YOU WILL BE ELIGIBLE FOR THE MOST PARTIAL CREDIT. YOU
MAY USE A CALCULATOR, BUT NO NOTES, BOOKS, OR OTHER STUDENTS. GOOD LUCK!

1.) (5 pts.) Suppose an object can move only along the positive x-axis. Also suppose the
object is moving away from the origin at a steadily decreasing speed. Sketch the object's

a.) (2 pts.) position vs. time graph;

b.) (3 pts.) velocity vs. time graph.

2.) (5 pts.) Let \( f \) be the function shown in the given graph.

a.) (2 pts.) Between which pairs of labeled points does \( f \) have a stationary point?

\[ A \text{ and } B \quad (\text{local max between}) \]

\[ C \text{ and } D \quad (\text{local min between}) \]

b.) (3 pts.) Between which pair of labeled points is \( f' \) increasing?

\[ C \text{ and } D \]

(\text{concave up } \implies f' \text{ increasing})