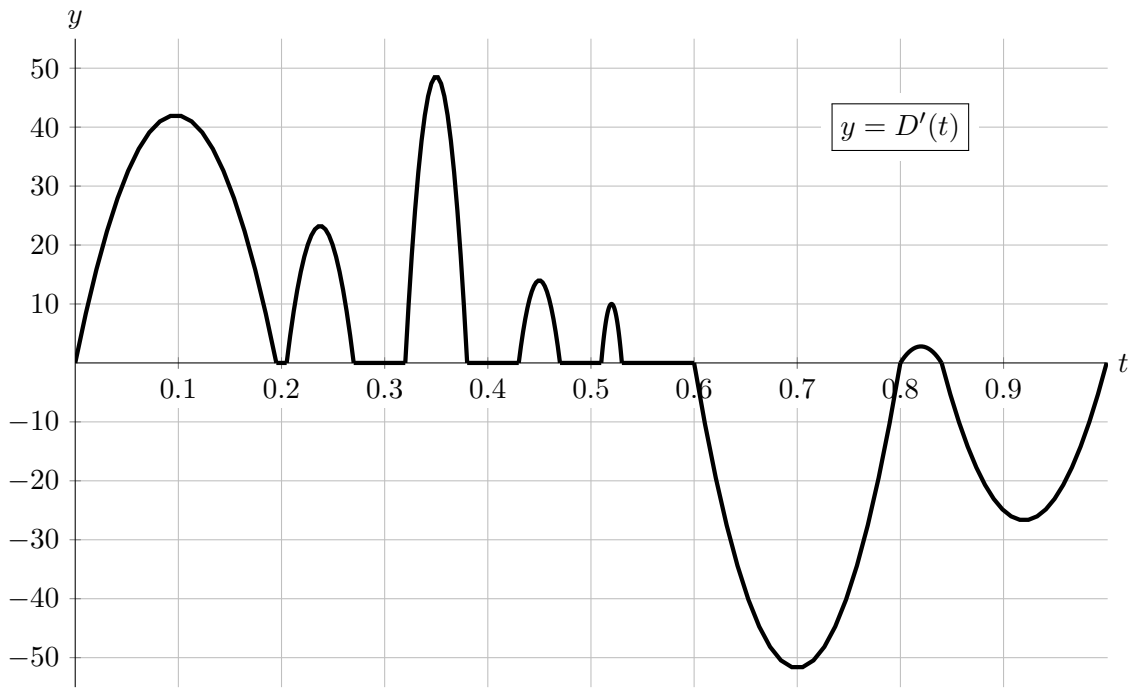
**7**. [9 points] A pizza delivery driver works for a pizzeria on Main Street, which is a long, straight road. The driver tracks her location with her phone while driving a route on Main Street. Let $D(t)$ be her distance from her pizzeria, in miles, at time $t$ hours after noon. Below is a portion of the graph of $D'(t)$, the **derivative** of $D(t)$.




**a**. [2 points] On which of the following intervals of $t$ is the driver getting closer to her pizzeria for the entire interval? Give your answer as a list of one or more intervals, or write NONE.

$(0.1, 0.2)$ $(0.2, 0.3)$ $(0.6, 0.8)$ $(0.8, 1)$

**b**. [3 points] The speed limit in the driver's hometown is 40 miles per hour. How many different times does she *begin* to drive over the speed limit?

**c**. [2 points] At which of the following times is the driver farthest from her pizzeria? Write the one best answer.

$t = 0.1$ $t = 0.35$ $t = 0.5$ $t = 0.6$ $t = 0.7$

**d**. [2 points] Write the number of the the sentence below that best describes the driver's behavior on the interval $0.2 \leq t \leq 0.5$.

1. *The driver keeps returning to the pizzeria to pick up more pizza.*
2. *The driver is driving on a highway without any traffic.*
3. *The driver stops at a series of red lights.*
4. *The driver is driving in circles, looking for a place to park.*