3. You are driving to Detroit to see a concert at the Majestic Theater. You leave Ann Arbor at 6:00 pm. Let $D(t)$ be your distance from Detroit t minutes after 6:00.

   (a) (3 points) What is the sign (positive or negative) of $D'(t)$, assuming you never turn around on your way to Detroit? Explain.

   As you approach the city, you notice signs indicating the distance remaining. To pass the time, your friend, riding in the passenger seat, makes the following table:

t, minutes after 6:00	0	3	6	10	15	18	20	22	25	30
$D(t)$, miles from Detroit	50	47	43	38	35	35	32	30	27	20

   (b) (4 points) Use the table to estimate $D'(6)$. Include units.

   (c) (3 points) Based on your answer to (**??**), approximately what did your speedometer read at 6:06? (Your car's speedometer gives speed in miles/hour.)

   (d) (4 points) Could $D(t)$ be linear ...

      • for $20 \leq t \leq 30$? Briefly explain.

      • for $20 \leq t \leq 25$? Briefly explain.