

Quiz (Week 05-11-2017 – 09-11-2017) MATH-101, CALCULUS I
PREPARED BY DR. KAREEM ELGINDY

Question 1. [Business] Suppose that the function

$$N(t) = \frac{250,000t^2}{(2t + 1)^2}, \quad t > 0,$$

represents the quantity sold N of a product after t weeks on the market.

- a) Find $N'(t)$.
- b) Find $N''(t)$, then use it to calculate $N''(52)$ and $N''(208)$.
- c) Interpret the results obtained in Parts a) and b).