

7. (11 points) Suppose  $P = m(t)$  is the population of Mexico in millions, where  $t$  is the number of years since 1980. Explain the meaning of the statements below. You should only use terms and phrases understandable to someone who has never taken calculus. (Assume that the population function is invertible.)

(a) (3 pts.)  $\left. \frac{dP}{dt} \right|_{t=0} > 0$

(b) (4 pts.)  $m^{-1}(97.5) = 18$

(c) (4 pts.)  $(m^{-1})'(97.5) = 0.46$