QUIZ 8

NAME:__________________________

Section 3.1

41. Find the rate of change of a population of size $P(t) = t^3 + 4t + 1$ at time $t = 2$.

Section 3.2

Differentiate the function.

9. $y = 3x - 2 \cdot 4^x$

Section 3.3

45. A fish population is approximated by $P(t) = 10e^{0.6t}$, where $t$ is in months. Calculate and use units to explain what each of the following tells us about the population:

(a) $P(12)$  
(b) $P'(12)$