Foundations and Pre-Calculus 10

Name:

<u>Section 3.3 – Applications and Function Notation</u>

Find the Slope (Rate of Change – Slope with Units) of the following scenarios

I bought a used car (2 years old) for $12 000, and I sold it 3 years later for $5600. Considering a steady rate of change. What is the depreciation rate of the car per year?	My odometer read $112345km$ and I had a full tank of gas. When my tank was empty, $30L$ later, my odometer read $112847km$. How far can I travel per litre?
Given the function: $f(x) = 3x + 5$. What is $f(3)$.	Given the function: $f(x) = 2x^2 + 5x - 4$ What is $f(-3)$.
Given the function: $f(x) = 3x^3 - 2x^2 + 4x - 5$ What is $f(k)$.	Given the function: $f(x) = 5x + 4$ What is $f(x + h) - f(x)$.