Name: _____   UIN: _____   Section: _____   Score: _____

Calculate x for the first three time steps of the following initial value problem using Euler's method and a time step of $\Delta t = 0.1$ seconds:

$$3\dot{x} = 2x^2 - x$$

$$x(0) = -1$$

Euler's method
$x(t + \Delta t) = x(t) + \Delta t \cdot f(x)$
Where $f(x) = \dot{x}$

t	x	$\dot{x}$
0	-1	1
0.1	-0.9	0.84
0.2	-0.816	0.716
0.3	-0.7444	