QUIZ 4 - MATH 112 YOUR NAME:

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Find an equation for the tangent line to the graph of
$$f(x) = \frac{x^3 + 11x}{x+5}$$
 at $x = 1$.

- 2. Suppose the position function s(t) in meters from the origin of a moving object at time t in seconds is given by $s(t) = \frac{1}{3}t^3 \frac{17}{2}t^2 + 70t + 2014$.
 - (a) Find the initial position of the object.
 - (b) Find the time(s) when the object was momentarily at rest.

(c) Find what was the instantaneous acceleration of the object at the first point in time in which it was momentarily at rest.