NAME:

Find the derivative for each of the following functions. Apply the theorems from class instead of beginning with the definition.

1. (4 points)
$$f(x) = 3x^3 - 5x^2 + 10x - 3$$

2. (4 points)
$$g(x) = -5$$

3. (4 points)
$$y = 6e^x - 12\sqrt{x}$$

4. The graph below shows the funtion

$$f(t) = -3t^2 + 5t - 3.$$

Find the equation for the tangent line to this curve at the point (2, -5). Sketch your result on the graph.

