Instructions: Include all relevant work to get full credit.

Quiz #6 (odd numbers) and #7 (even numbers)

Determine the derivative of the following functions (You don't have to simplify):

1.
$$f(x) = (2x^3 - 3x + 10)^5$$
 [2]

2.
$$g(x) = (x^3 - 3x)^5 (5 - x^2)^4$$
 [2]

3.
$$h(x) = \frac{2x^5}{3 - x^2}$$
 [2]

4.
$$y = \frac{\sqrt[3]{3-2x}}{\sqrt{4-3x^2}}$$
 [2]

5.
$$f(\theta) = \cos(\theta^2)$$
 [2]

$$6. \ f(\theta) = \sin^2(\theta^2)$$

7.
$$f(\theta) = e^{4\theta} \tan(2\theta)$$
[2]

8.
$$f(\theta) = \left(\frac{e^{4\theta}}{\sec\theta}\right)^5$$
 [2]

9.
$$f(t) = e^{(2t^3)}5^{4t}$$
 [2]

10.
$$f(t) = \frac{e^{(3t)}\sin(4t)}{2t^3}$$
 [2]