Name: _____ Date: _____

Learning Goal 3.1	Using all basic derivative rules.

More Questions

1. Find the derivative any way your heart desires. Simplify as much as possible.

a. $y = (6x^3 - x)(10 - 2x)$

b. $h(x) = \dfrac{4\sqrt{x}}{x^2 - 2}$

c. $y = \dfrac{4}{x^2}$

d. $f(x) = \dfrac{x^3}{x^3 - 5x + 10}$

e. $g(x) = \dfrac{(x-5)^2}{x^{20}}$

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

g. $y = (x^2 + 5x - 3)(x^{-5})$

h. $f(x) = (5x^3 + 12x^2 - 15)^{-1}$

i. $\dfrac{d}{dx}(-4x^5 + 3x^3 - 5/x^2)$

2. Find an equation for the tangent line at $x = 3$ to

$$f(x) = \frac{x^2 - 4}{5 - x}$$

3. Find a cubic polynomial whose graph has horizontal tangents at $(-2, 5)$ and $(2, 3)$.