

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Differentiate each function with respect to  $x$ .**

1)  $y = (-4x^4 + 3)(x^4 - 1)$

2)  $y = (-2x^2 + 3)(-4x^5 + 4)$

3)  $y = (2x^2 + 3)(4x^4 + 1)$

4)  $y = (-4x^3 + 1)(-2x^2 + 1)$

5)  $y = (2x^4 + 5)(5x^5 - 2)$

6)  $f(x) = (3x^5 + 3)(x^3 + 2)$

$$7) y = (5x^2 + 2)(-5x^3 - 4)$$

$$8) y = (-3x^5 - 3)(-2x^4 + 5)$$

$$9) f(x) = (3x^2 - 1)(4x^4 + 2)$$

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

$$11) f(x) = (-x^4 + 4)(-5x^4 + 1)$$

$$12) f(x) = (x^4 - 4)(-4x^2 + 4)$$