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| 9.7 |
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9.7: Using Derivative Formulas

Ex 1: Find the derivatives of the following.

a) $f(x) = \frac{1}{4}$

b) $y = \frac{x^4}{4}$

c) $y = (x^3 - 5x^2 + 1)(x^3 - 3)$

d) $g(x) = \frac{1 + x^2 - x^4}{1 + x^4}$

e) $y = \frac{(x^3 - 4x)^{10}}{10}$

f) $y = \frac{5}{3}x^3(4x^5 - 5)^3$

g) $h(x) = 3x^4(2x^5 + 1)^7$

h) $f(x) = (5x^3 + 1)(x^4 + 5x)^2$

i) $p = [(q+1)(q^3-3)]^3$

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

k) $y = \left(\frac{2x-1}{x^2+x}\right)^4$

l) $g(x) = \frac{\sqrt[3]{2x-1}}{2x+1}$

m) $r(x) = x^3\sqrt[3]{3x^3+2}$