

Find the derivative of the given function.

1.  $f(x) = x^{-4}$

2.  $f(x) = \frac{1}{3}x^3 - 2x^2 + 10x - 7$

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

4.  $f(x) = \frac{10}{x^4} + \frac{3}{x^2}$

5.  $f(x) = (3x - 2)(4x + 5)$  (*hint: use Product Rule*)

6.  $f(x) = x^2(x^3 - 1)$  (*Product Rule*)

7.  $f(x) = \frac{x^2}{x-5}$  (*Quotient Rule*)

8.  $f(x) = \frac{2x-5}{x}$  (*Quotient Rule*)