

12C General Rules

1. Find $f'(x)$ for each of the expressions for $f(x)$ to the right.

a) $f(x) = x^6$

b) $f(x) = x^{\frac{1}{2}}$

c) $f(x) = x^{-2}$

d) $f(x) = x^2 \times x^3$

e) $f(x) = \frac{x}{x^5}$

f) $f(x) = 7x^3$

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

h) $f(x) = \sqrt{36x^3}$