a special case: quotient rule

exercise 3

a special case: quotient rule

If f and g are differentiable, then

$$\frac{d}{dx}\left[\frac{f(x)}{g(x)}\right] = \frac{f'(x)g(x) - f(x)g'(x)}{[g(x)^2]}$$

This is simply the product rule for rational functions!

exercise 3

Write

$$\frac{f(x)}{g(x)} = f(x)[g(x)]^{-1}$$

and show that the quotient rule is the product rule for rational functions.

maxima and minima