

## Some More Differentiation Practice

1. Take the derivative of the following functions:

(a)  $h(x) = \ln(3)$

(b)  $h(x) = \ln(3x)$

(c)  $h(x) = \ln(4x^3 + 2)$

(d)  $h(x) = 3 \sin^{-1}(2x)$

(e)  $h(x) = \sin(3x) \ln(2x)$

(f)  $f(x) = \sin(\ln(3x))$

(g)  $g(x) = \ln(\sin(3x))$

2. Try making sketches of  $f(x)$  and  $g(x)$ .