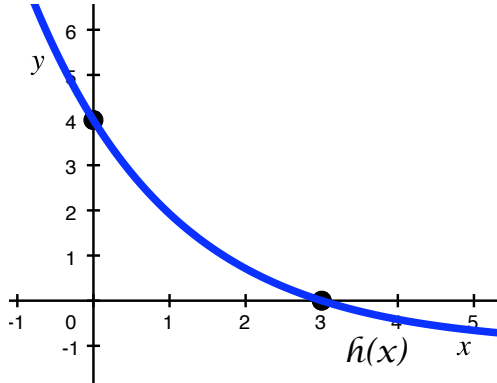


1. Given the functions $f(x) = 4x^2 + x$ and $g(x) = 3 - x$, find the following.

(a) (1 pt.) $g(f(1))$

(b) (2 pts.) $f(g(x))$

2. The function $h(x)$ is shown below. Find the following.



(a) (1 pt.) $h(0)$

(b) (1 pt.) $h^{-1}(0)$

(c) (1 pt.) $h(h(3))$

3. Solve the following quadratic equations. Simplify your answers as much as possible.

(a) (2 pts.) $t^2 + 4t = 12$

(b) (2 pts.) $2x^2 - 2x - 1 = 0$