

### Functions Notation Worksheet

1. If  $f(x) = \sqrt{x}$ , find:

a)  $y = f(0)$

b)  $y = f(-1)$

c)  $y = f(4)$

d)  $y = f(-4)$

e)  $y = f(z)$

2. If  $f(x) = x^3$ , find:

a)  $f(2x)$

b)  $f(2x) + 1$

c)  $f(2x + 1)$

d)  $y = f(2x)$

e)  $y = f(2x) + 1$

f)  $y = f(2x + 1)$

g)  $y = f(2x+1)+4$

3. If  $f(x) = \sqrt{x^2 + 2} - 2$   
and  $g(x) = 2x - 1$ , find:

a)  $f(0)$

b)  $g(1)$

c)  $f(x+1)$

d)  $g(x^2 - 2)$

e)  $f(g(x))$

f)  $g(f(x))$

g)  $f(g(-1))$

h)  $g(f(x-1))$