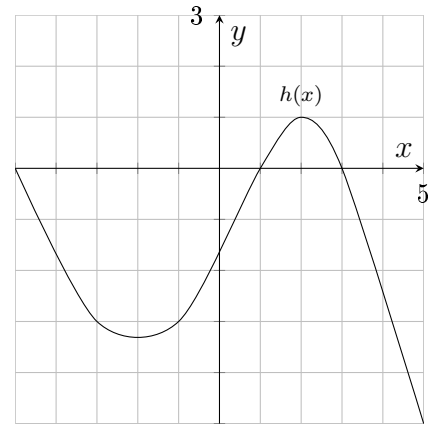


1. (2ea) Use the functions below to compute (and simplify) the following quantities. **Show some work!** (with correct notation)

$$f(x) = \frac{2x}{x-3}$$

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

$x$	-2	-1	0	1	2	3
$k(x)$	-3	2	1	3	-4	5



a)  $(f \circ g)(x) =$

b)  $(g + f)(1) =$

c)  $(gk)(-2) =$

d)  $(k + h)(-1) =$

$$\text{e) } (g \circ g)(3) =$$

$$\text{f) } (k \circ k)(1) =$$

$$\text{g) } g((h + k)(2)) =$$

$$\text{h) } \left(\frac{f}{g}\right)(2) =$$

$$\text{i) } (h \circ h)(2) =$$

$$\text{j) } g(f(k(3))) =$$