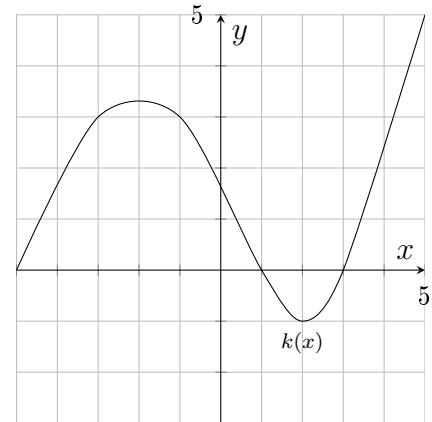


1. (2ea) Use the functions below to compute the following quantities. **Show some work!**

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

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

| | | | | | | |
|--------|----|----|---|---|----|---|
| x | -2 | -1 | 0 | 1 | 2 | 3 |
| $h(x)$ | -3 | 2 | 1 | 3 | -4 | 5 |



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

b) $(g \circ f)(x)$

c) $(f + g)(1)$

d) $(fh)(-2)$

e) $(h + k)(-1)$

f) $(f \circ f)(3)$

g) $(h \circ h)(1)$

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

i) $(k \circ k)(2)$

j) $f(g(h(3)))$