

# Functions and models



Functions and Models Which of the following are functions? The last two problems, i. e., b & c, are multi part relations consider all parts when determining whether or not these relations are functions. Explain your reasoning for a, b, and c.

a.  $f(x) = x + 5$

(a) is a function, as the  $f(x)$  returns a distinct output for every value of  $x$ .

b.  $f(x) = 3$  if  $x > 2$  otherwise  $f(x) = -2$

(b) is also a function, as the output is distinct for every input value of  $x$ . It is clear that  $f(x)$  will be 3 for all values above 2 and will be equal to -2 for all other values of  $x$ .

c.  $f(x) = 7$  if  $x > 0$  or  $f(x) = -7$  if  $x$