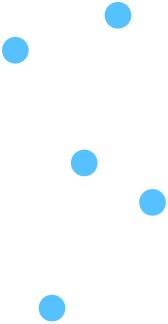


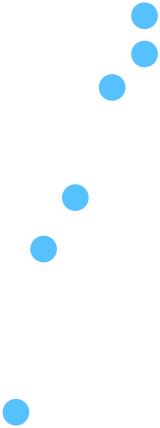
## visual representations of functions and relations

are all of these functions?



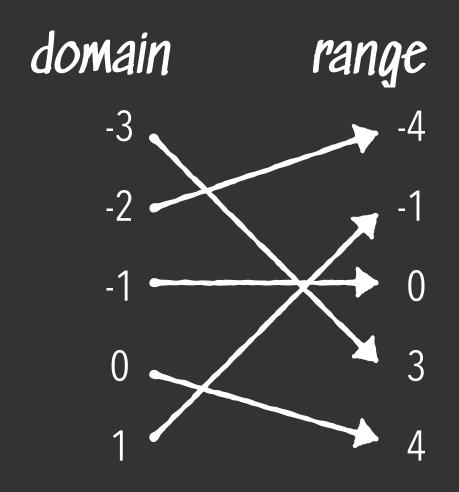
the vertical line test

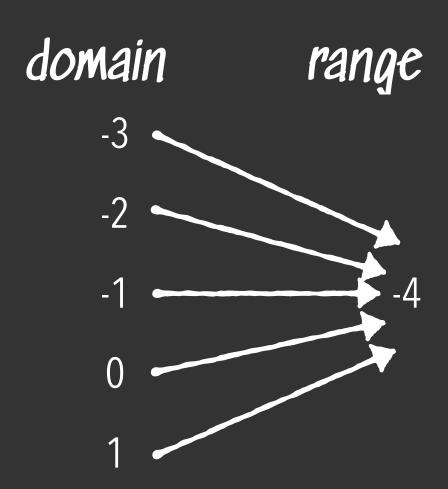


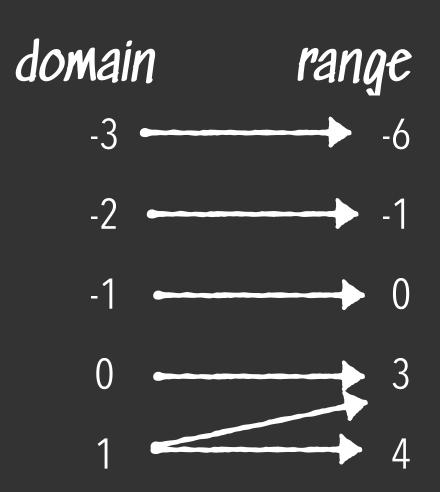




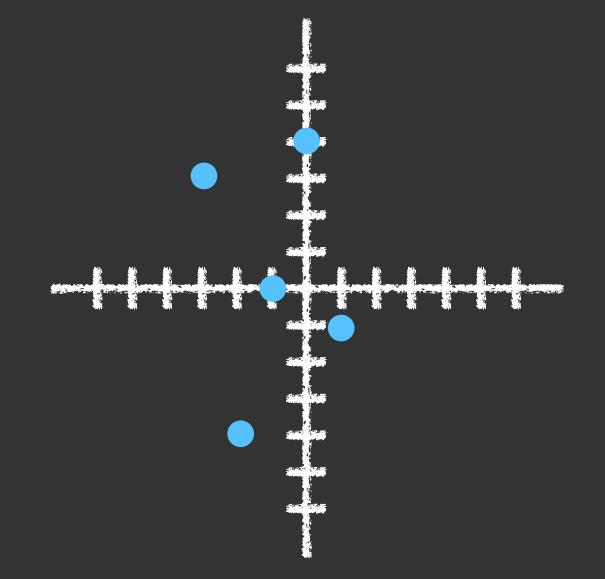
## visual representations of functions and relations

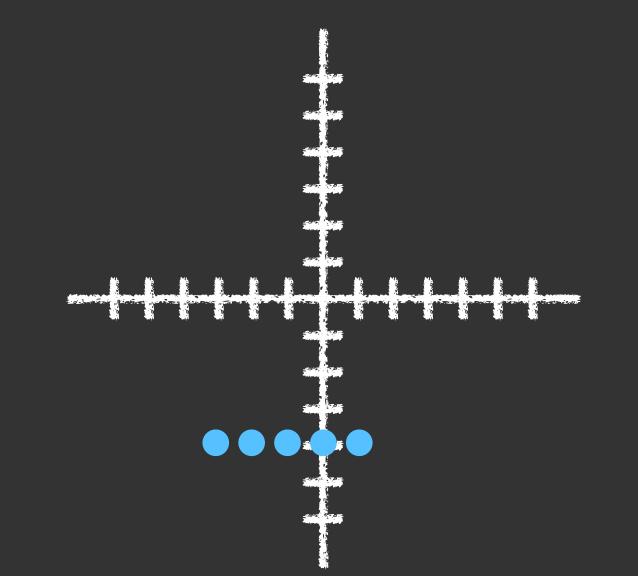


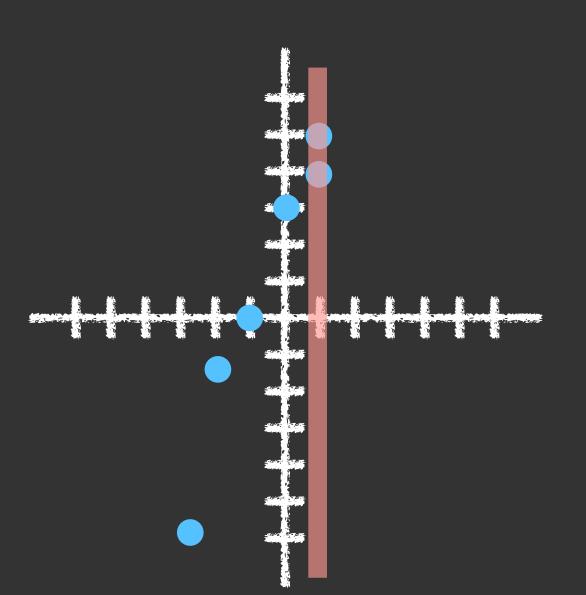




are all of these functions?  $\implies$  the vertical line test







## function composition