

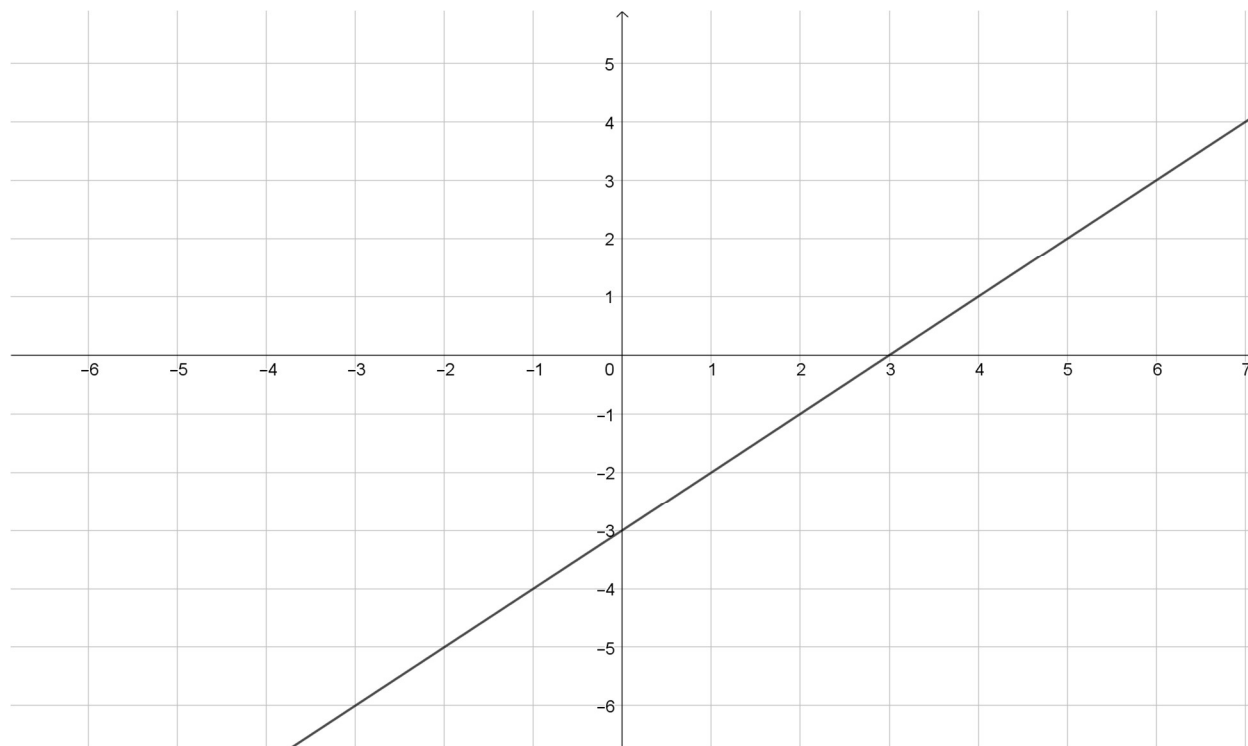
## GRAPHING THE RECIPROCAL OF A FUNCTION

AN INTRODUCTION

Consider the graph of  $f(x) = x - 3$  shown below.

What would be the equation of the reciprocal of this function? \_\_\_\_\_ or \_\_\_\_\_.

Try to draw the graph of the reciprocal of  $f(x) = x - 3$ .



Properties to consider when plotting the reciprocal of a function:

1) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

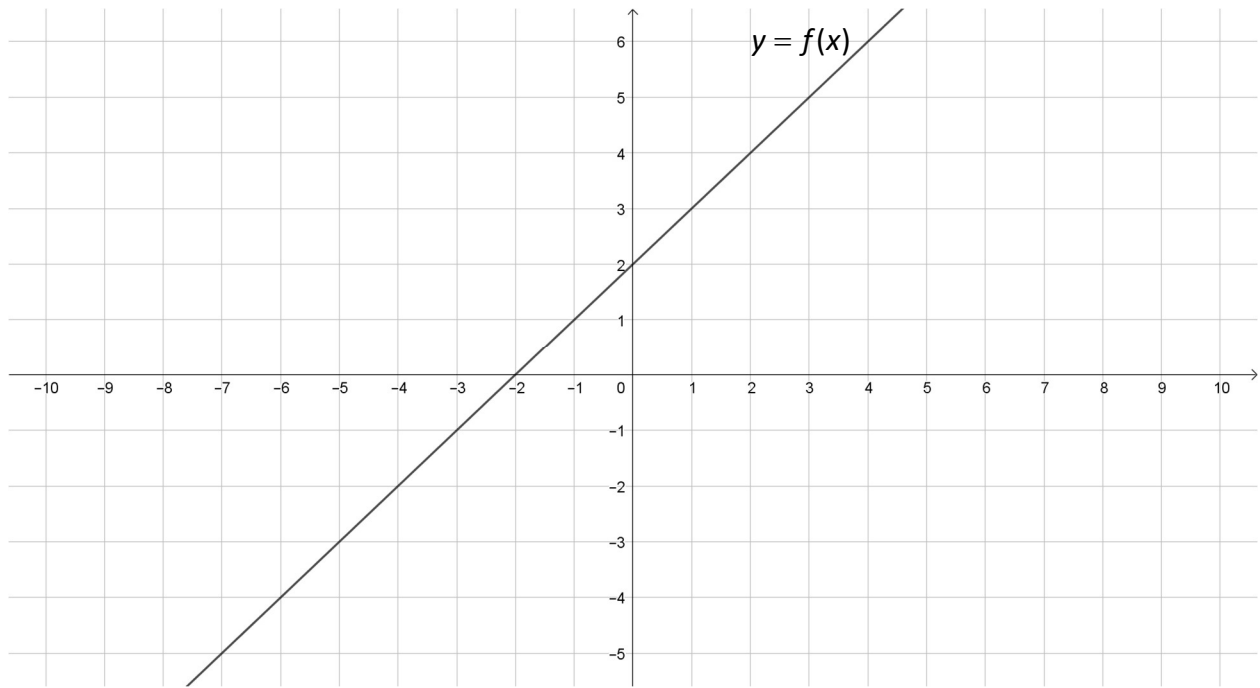
2) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

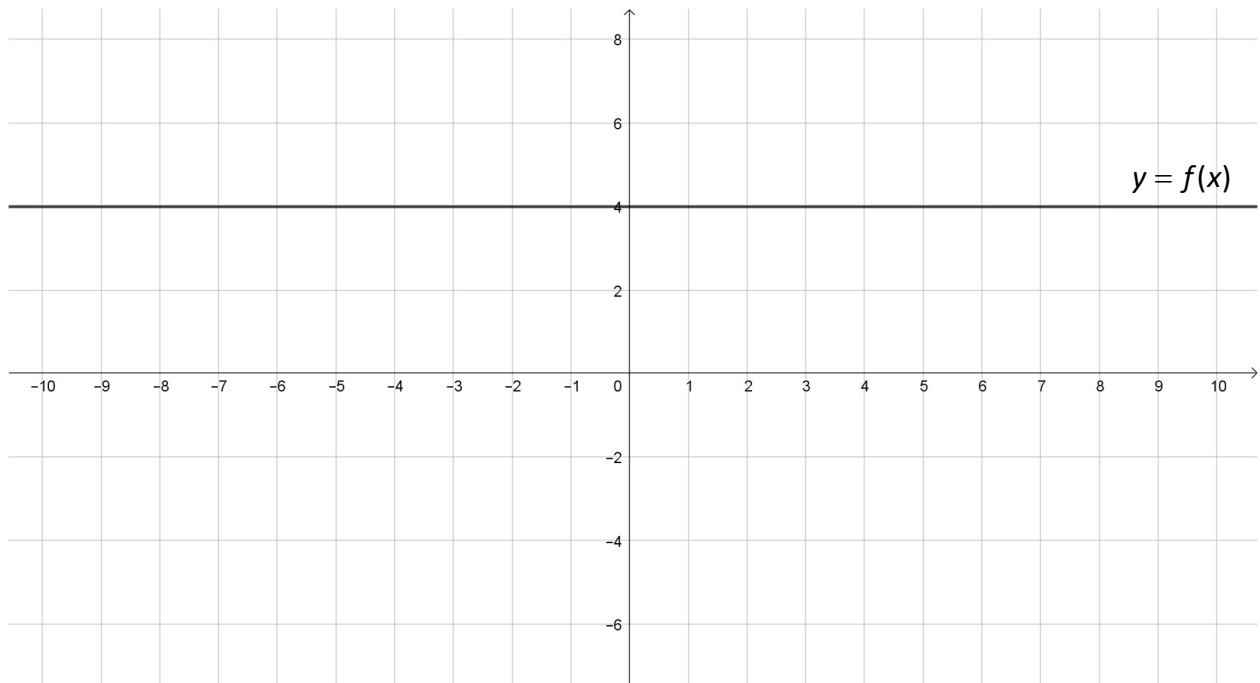
### Examples

For each of the following graphs of  $y = f(x)$ , sketch the corresponding graph of  $y = \frac{1}{f(x)}$ .

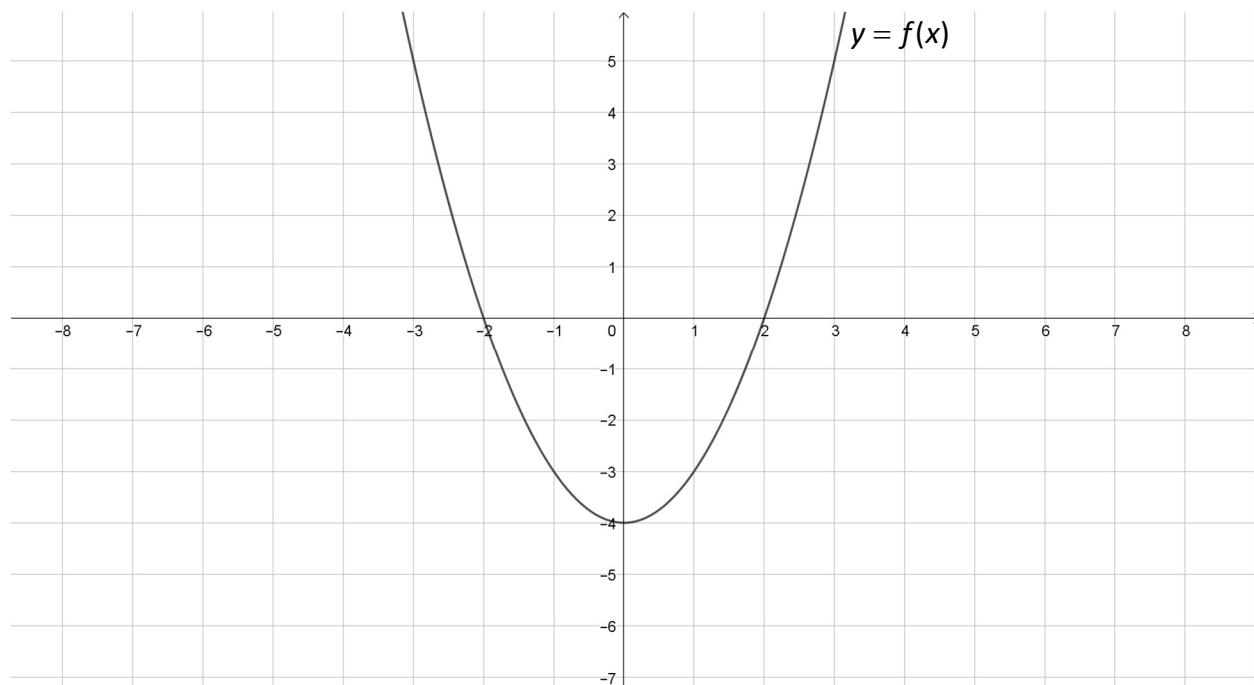
1)



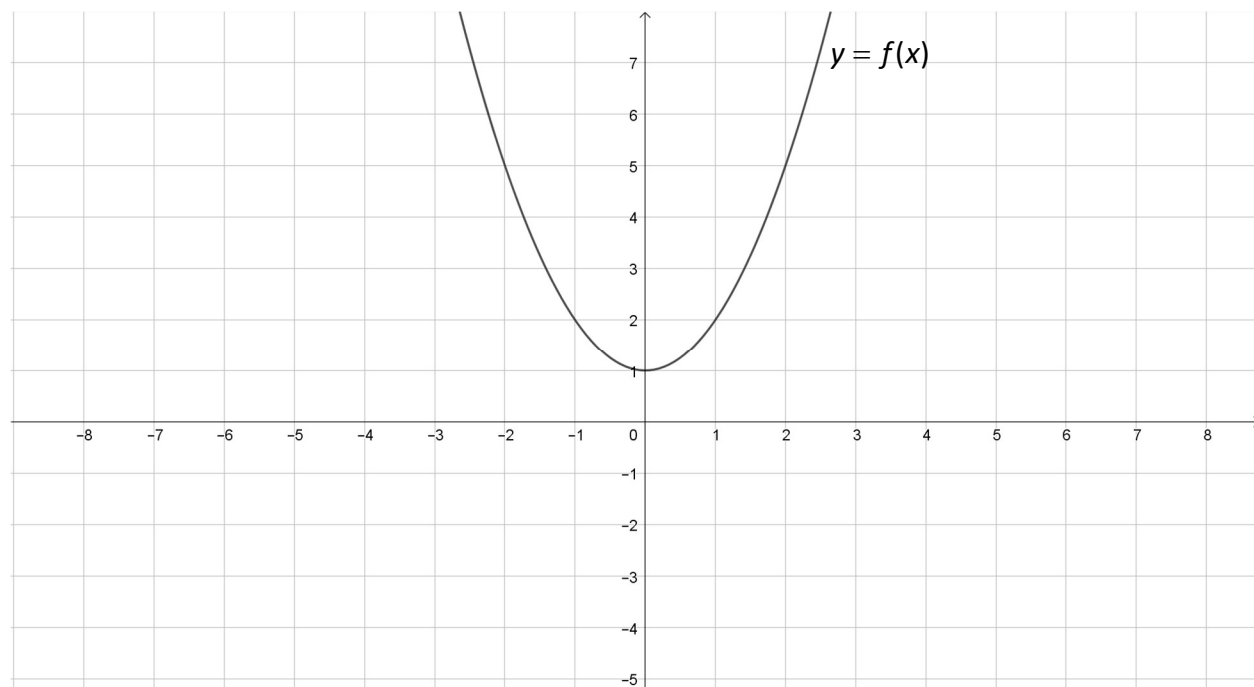
2)



3)



4)



5)

