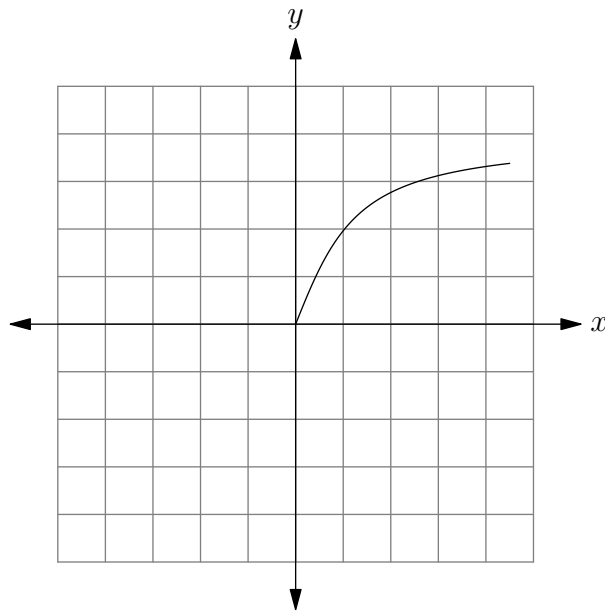


## Quiz 4A: Symmetry and functions

MATH 1110, FALL 2017

NAME:

1. (5 points) Part of a function  $f(x)$  is shown in the following graph. Suppose you know this function is symmetric with respect to the origin. Use this information to sketch the remaining part of the graph.



2. (5 points) Consider the following equation.

$$y^3 = x^4 - 2$$

Test this equation to see if the solutions are symmetric with respect to the  $x$ -axis, the  $y$ -axis, or the origin.

3. (10 points) Define the function  $h(x) = 6x - x^2$ . Evaluate each expression, and simplify your answer as much as possible.

(a)  $h(-3)$

(b)  $h(0)$

(c)  $h(a + 2)$