

Name: Caleb McWhorter — Solutions

MATH 101

Fall 2022

HW 7: Due 10/17

*“The irreducible price of learning is  
realizing that you do not know.”*

*—James Baldwin*

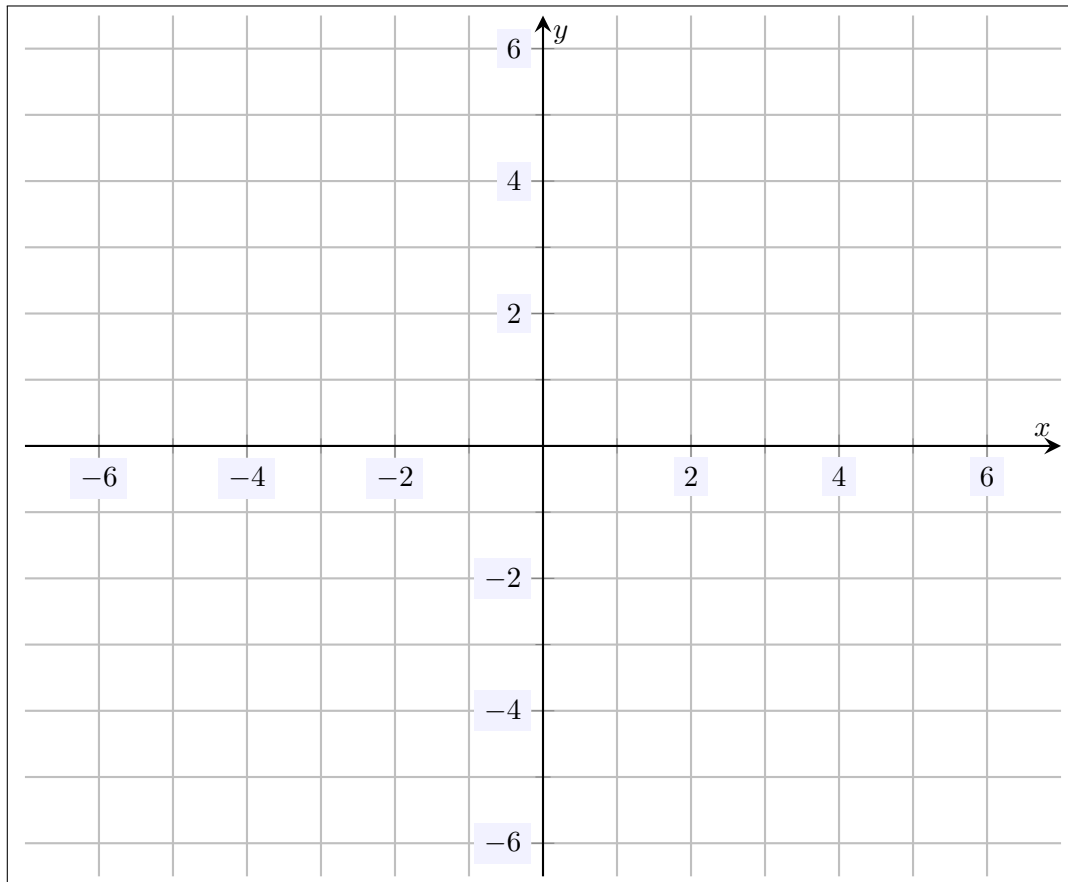
**Problem 1.** (10pt) Do you think a person’s height is a function of time? Do you think a person’s salary is a function of their body temperature? For each, explain why or why not.

**Problem 2.** (10pt) Determine if the relations  $f(x)$  and  $g(x)$  shown below are functions. Explain why or why not. If the relation is a function, compute the functions value at  $x = -4.1$ .

$$f(x) = 198.3 - 17.3x$$

$$g(x) = 4x^2 + 16.1x - 10.3$$

**Problem 3.** (10pt) Plot the function  $f(x) := \frac{1}{2}x - 5$ , being as accurate as possible.



**Problem 4.** (10pt) Plot the function  $f(x) := -x^2 + 4x - 1$ , being as accurate as possible.

