

Name: _____

MATH 101

Fall 2022

HW 13: Due 11/07

*"Above all, don't fear difficult moments.
The best comes from them."*

—Rita Levi-Montalcini

Problem 1. (10pt) Consider the linear function $f(x) = 7 - \frac{6}{7}x$.

- (a) Find the rate of change of $f(x)$.
- (b) Is $f(x)$ increasing or decreasing? Explain.
- (c) Find the y -intercept of $f(x)$.
- (d) Find $f(-3)$.

Problem 2. (10pt) Using the plot of the linear function $f(x)$ below, answer the following:

- (a) Find the slope of the given line.
- (b) Find the y -intercept of the given line.
- (c) Find $f(x)$.
- (d) Find the x -intercept of $f(x)$.

