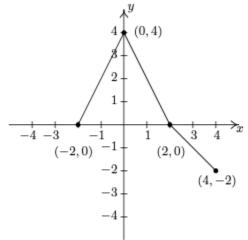
MTH 161, Quiz #3, Fall 2024

Name ____

Instructions: Show all work. Use exact answers unless otherwise asked to round.

- 1. Write the function $f(x) = \sqrt{x}$ after it has undergone the following transformations. Your final equation should include all the transformations.
 - a. Horizontal shift to the right of 2
 - b. Vertical reflection
 - c. Vertical stretch by 3
 - d. Vertical shift down by 5
- 2. Given the graph of the function f(x) below, draw the graph of the function g(x) = -2f(x-2) + 3.



- 3. Find an equation of the line with the following properties: Passing through the points (-3, -4) and (2,5). Write the solution in:
 - a. Standard form
 - b. Slope-intercept form
 - c. As a function

- 4. Given the equation 4x + 3y = 24, write an equation of a line with the following properties: a. A line parallel to the original line passing through the point (4.-2).
 - b. A line perpendicular to the original line passing through the point (-3,1).
- 5. Solve the equation |2 5x| = 5|x + 1|.