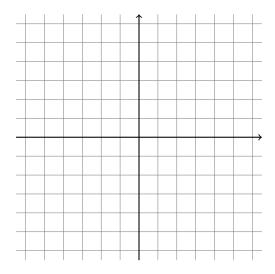
## MATH19501 Quiz 4 - Winter 25

Name:	EMPLID:

Answer all 4 questions. You must show all of your work as neatly and clearly as possible and indicate the final answer in the provided region for each non-graph question. For all graph questions, you should sketch your graph on the grid provided.

1. Sketch a graph of the function  $f(x) = (x-2)^2 + 2$  as a transformation of the graph of the toolkit function  $x^2$ .

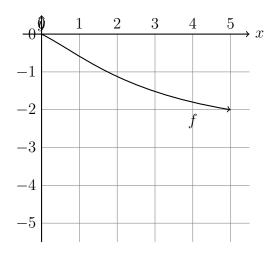


2. Find the x-intercepts of g(x) = 4|x-3| + 4. Write your answers in coordinate point form (x, y).

Write your answer in the box below:



3. Using the graphs of transformations of the square root function, find a formula for the function f(x).



Write your answer in the box below:

$$f(x) =$$

4. Sketch the graph of the function h(x) = |x-1| - 3. Label all intercepts on your graph.

