

MATH19501 Quiz 3 - Winter 25

Name: _____

EMPLID: _____

September 19th, 2024 Answer all 2 questions. You must show all of your work as neatly

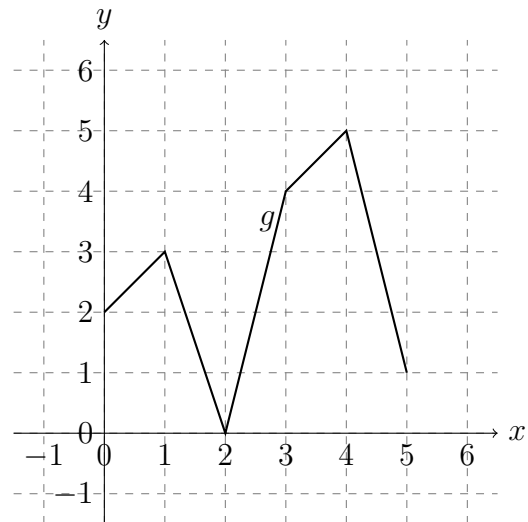
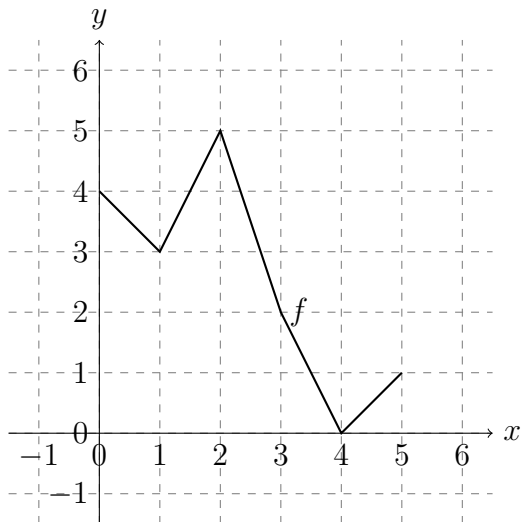
and clearly as possible and indicate the final answer in the provided region for each non-graph question. For all graph questions, you should sketch your graph on the grid provided.

1. Let $f(x) = x^2 + 1$ and $g(x) = \sqrt{x + 2}$.

(a) Find $f(g(x))$. Simplify your answer. Write your answer in the box below:

(b) Find $g(f(x))$. Simplify your answer. Write your answer in the box below:

2. Use the graphs to evaluate the expressions below.



(a) Find $f(g(3))$. Write your answer in the box below:

(b) Find $g(f(1))$. Write your answer in the box below:

(c) Find $f(f(5))$. Write your answer in the box below:

(d) Find $g(g(2))$. Write your answer in the box below: