

MATH 19501 Quiz 17 - Winter 25

Name: _____

EMPLID: _____

Answer the question. 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. (10 points) Let $f(x) = \tan \frac{\pi}{4}x$.

(a) (2 points) Find the amplitude of $f(x)$. Write your answer in the box below:

(b) (2 points) Find the period of $f(x)$. Write your answer in the box below:

(c) (2 points) Find the domain of f . Write your answer in interval notation. Write your

answer in the box below:

(d) (4 points) Sketch one complete period of the graph of $f(x)$ in the appropriate interval $(-\frac{\pi}{2B}, \frac{\pi}{2B})$. Make sure to include the vertical asymptotes on your graph.

