1. (10 pts) What is $\sin(5\pi/6)$?
   A) $\frac{1}{2}$
   B) $\frac{\sqrt{3}}{2}$
   C) $\frac{\sqrt{2}}{2}$
   D) $\frac{-1}{2}$

2. (10 pts) Is the statement $\forall x \in \mathbb{R}, \sqrt{x^2} = x$ true or false?
   A) True
   B) False

3. (40 pts) Find where the function $f(x) = \frac{x}{x^2 + x - 20}$ is positive and where it is negative.
4. (40 pts) For the function $f$ whose graph is given, find the largest $\delta > 0$ such that

$$3 - \delta < x < 3 \Rightarrow |f(x) - 1| < 1.$$ 

Clearly explain why the number you propose for $\delta$ satisfy the condition and why it is the largest such number.