### 3.2 Practice Problems

1. Determine if the following graphs represent functions.
a.

b.

2. Find the domain and range of the function using its graph.

3. If the graph in problem 2 is named $f(x)$ find the following.
a) $f(0)$
b) For what values of x does $f(x)=0$ ?
c) For what values of x is $f(x)>0$ ?
4. If the graph is named $f(x)$ find the following.
a) $f(0)$
b) For what values of x does $f(x)=0$ ?
c) For what values of x is $f(x)>0$ ?

5. Consider the function: $f(x)=\frac{x+2}{x+3}$
a) Find the domain of $f$.
b) Is the point $\left(1, \frac{1}{2}\right)$ on the graph of $f$ ?
c) If $f(x)=2$, what is $x$ ?
d) What are the intercepts of the graph of $f$ (if any)?
