

### 1.3 Finding Limits from Graphs

Calculus

Name: \_\_\_\_\_

**CA #1**

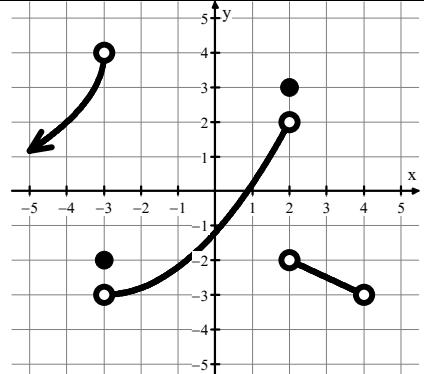
**For 1-2, give the value of each statement. If the value does not exist, write “*does not exist*” or “*undefined*.”**

1.

a.  $\lim_{x \rightarrow 2} f(x) =$       b.  $f(-3) =$       c.  $\lim_{x \rightarrow -3^-} f(x) =$

d.  $\lim_{x \rightarrow 2^+} f(x) =$       e.  $f(2) =$       f.  $\lim_{x \rightarrow 2^-} f(x) =$

g.  $\lim_{x \rightarrow -3^+} f(x) =$       h.  $f(4) =$       i.  $\lim_{x \rightarrow -3} f(x) =$

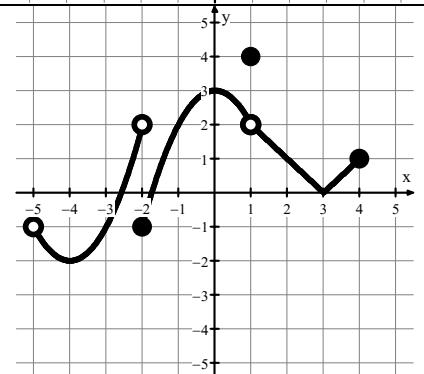


2.

a.  $\lim_{x \rightarrow 1} f(x) =$       b.  $f(-2) =$       c.  $\lim_{x \rightarrow -2^+} f(x) =$

d.  $\lim_{x \rightarrow 2} f(x) =$       e.  $f(-4) =$       f.  $\lim_{x \rightarrow 1^-} f(x) =$

g.  $\lim_{x \rightarrow 1^+} f(x) =$       h.  $f(-5) =$       i.  $f(1) =$



**3. Sketch a graph of a function  $f$  that satisfies all of the following conditions.**

a.  $f(3) = 4$

b.  $\lim_{x \rightarrow 3^-} f(x) = 2$

c.  $\lim_{x \rightarrow 3^+} f(x) = -4$

d.  $f(-2)$  is undefined.

e.  $\lim_{x \rightarrow -2^-} f(x) > \lim_{x \rightarrow -2^+} f(x)$

