## Limits Worksheet

1. For the function G graphed in the accompanying figure, find





**2.** For the function f graphed in the accompanying figure, find





**3.** For the function f graphed in the accompanying figure, find





4. For the function f graphed in the accompanying figure, find





5. For the function g graphed in the accompanying figure, find



6. On the axes provided below, sketch a possible graph for a function f with the specified properties.

i. the domain is  $\left[ -1,1\right]$ 

ii. 
$$f(-1) = f(0) = f(1) = 0$$

iii. 
$$\lim_{x \to -1^+} f(x) = \lim_{x \to 0} f(x) = \lim_{x \to 1^-} f(x) = 1$$



7. On the axes provided below, sketch a possible graph for a function f with the specified properties.

- i. the domain is  $[-\infty, 1]$
- ii. f(-2) = f(1) = 1
- iii.  $\lim_{x \to -2} f(x) = +\infty$



8. On the axes provided below, sketch a possible graph for a function f with the specified properties.

i. the domain is [-2,1]

ii. 
$$f(-2) = f(0) = f(1) = 0$$

iii.  $\lim_{x \to -2^+} f(x) = 2$ ,  $\lim_{x \to 0} f(x) = 0$ ,  $\lim_{x \to 1^-} f(x) = 1$ 

