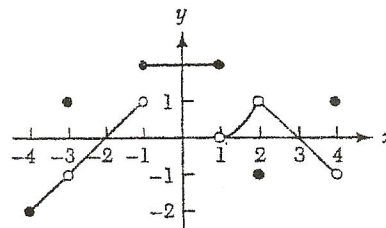


II. Limits from a Graph

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| 1. $\lim_{x \rightarrow 0} f(x)$   | 9. $\lim_{x \rightarrow -3^+} f(x)$  |
| 2. $\lim_{x \rightarrow 1^+} f(x)$ | 10. $\lim_{x \rightarrow -3^-} f(x)$ |
| 3. $\lim_{x \rightarrow 1^-} f(x)$ | 11. $\lim_{x \rightarrow -3} f(x)$   |
| 4. $\lim_{x \rightarrow 1} f(x)$   | 12. $f(3)$                           |
| 5. $f(1)$                          | 13. $\lim_{x \rightarrow 4^+} f(x)$  |
| 6. $\lim_{x \rightarrow 2^-} f(x)$ | 14. $\lim_{x \rightarrow -1^-} f(x)$ |
| 7. $f(2)$                          | 15. $f(-1)$                          |
| 8. $\lim_{x \rightarrow 2} f(x)$   | 16. $\lim_{x \rightarrow -4^+} f(x)$ |

Graph of  $f$



Practice

Sketch a graph of a function  $f$  that satisfies all of the following conditions:

- domain of  $(-6, 6]$
- $f(x)$  undefined at  $x = -6$  and  $x = 4$
- $f(-5) = 0, f(-2) = 1, f(6) = 2$
- $\lim_{x \rightarrow -6^+} f(x) = 1, \lim_{x \rightarrow -2^-} f(x) = -1, \lim_{x \rightarrow -2^+} f(x) = 3$
- $\lim_{x \rightarrow 2^-} f(x) = -3, \lim_{x \rightarrow 2^+} f(x) = 2, \lim_{x \rightarrow 6^-} f(x) = 1$

