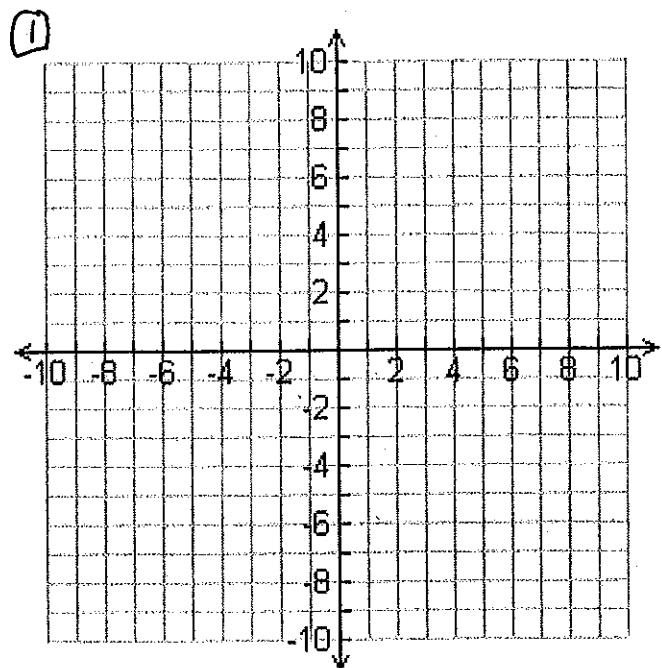


# Piecewise Functions

ACT # 37

$$f(x) = \begin{cases} -x - 8, & 0 < x \leq 3 \\ -x^2 + 7, & -2 \leq x \leq 0 \\ |x|, & x < -2 \end{cases}$$



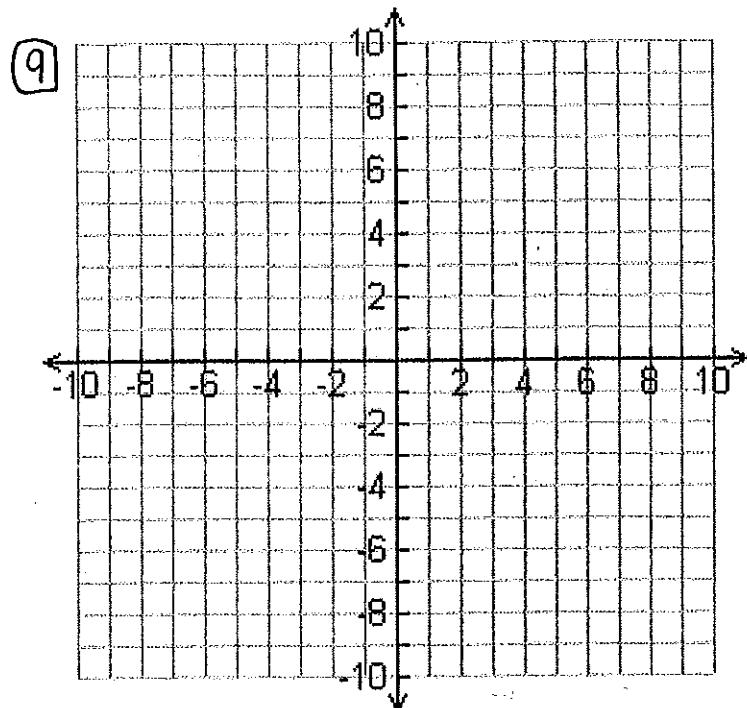
1. Graph the function.

2. What is the Domain?

- ③ Evaluate  $f(0)$   
 ④ Evaluate  $f(2)$   
 ⑤ Evaluate  $f(-3)$

- ⑥ Evaluate  $f(-10)$   
 ⑦ Evaluate  $f(-1)$   
 ⑧ Evaluate  $f(3)$

$$f(x) = \begin{cases} x^2 - 1, & x \leq 0 \\ 2x - 1, & 0 < x \leq 5 \\ 3, & x > 5 \end{cases}$$



9. Graph the function.

10. What is the Domain?

11. Evaluate  $f(4)$   
 12. Evaluate  $f(-7)$   
 13. Evaluate  $f(1)$

14. Evaluate :  $f(-4)$   
 15. Evaluate :  $f(10)$

16. Evaluate :  $f(20)$