

Algebra 2 Honors

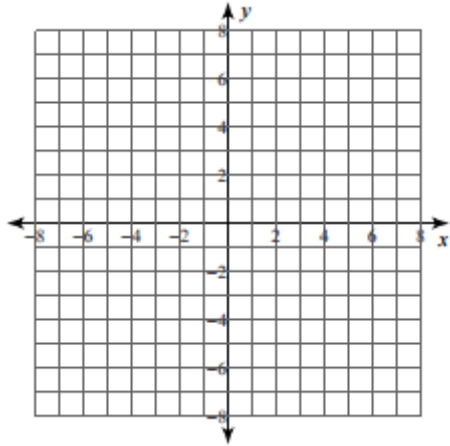
WS: 6.3 and Absolute Value Functions Extra Practice

Name _____

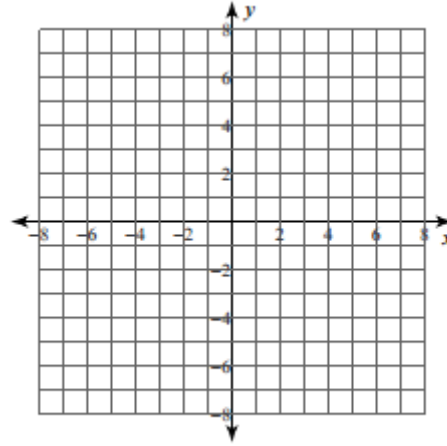
Date _____ Block _____

In 1 – 9, graph each function.

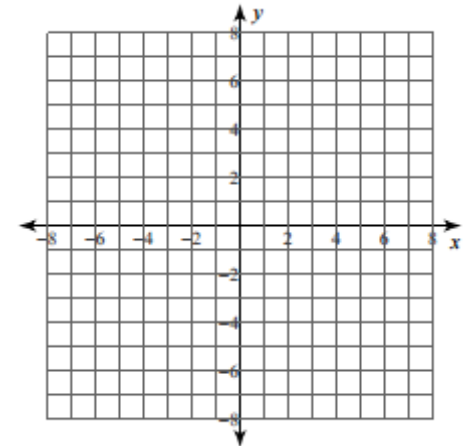
$$f(x) = \begin{cases} -2x-1, & x \leq 2 \\ -x+4, & x > 2 \end{cases}$$



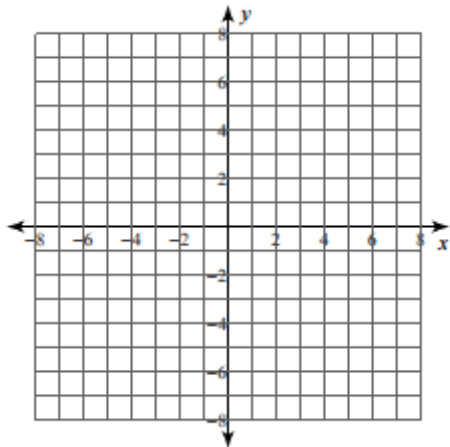
$$f(x) = \begin{cases} -|x|, & x \leq 0 \\ 4-x^2, & x > 0 \end{cases}$$



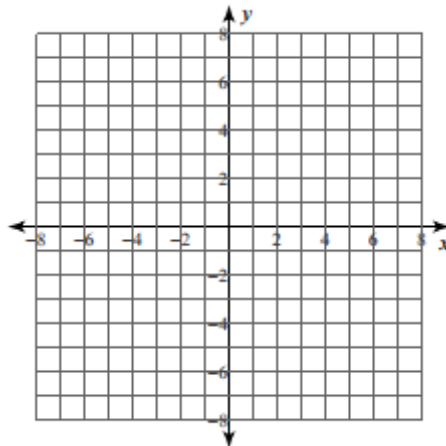
$$f(x) = \begin{cases} -4, & x \leq -2 \\ x-2, & -2 < x < 2 \\ -2x+4, & x \geq 2 \end{cases}$$



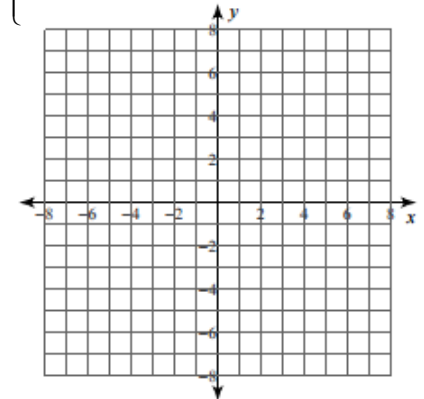
$$f(x) = \begin{cases} -6, & x < -2 \\ (x+1)^4, & x \geq -2 \end{cases}$$



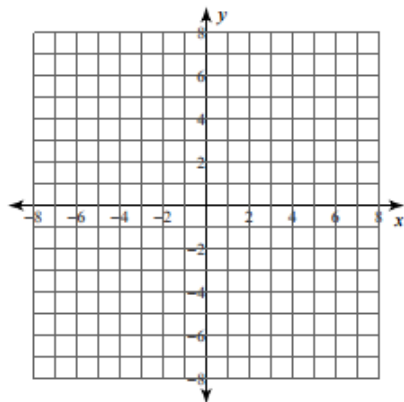
$$f(x) = \begin{cases} \frac{1}{x-4}, & x \leq 4 \\ -4, & x > 4 \end{cases}$$



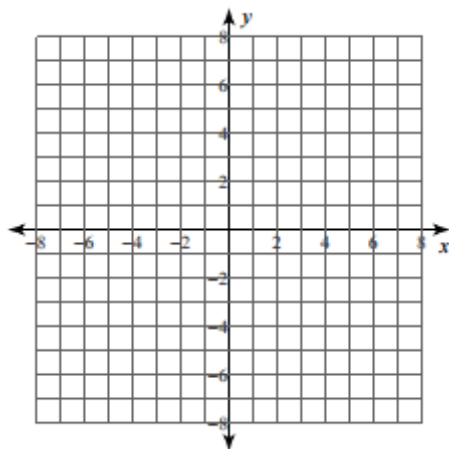
$$f(x) = \begin{cases} \frac{1}{2}|x|, & x \leq -4 \\ \sqrt{-x}, & -4 < x < 2 \\ |x-2|, & x \geq 2 \end{cases}$$



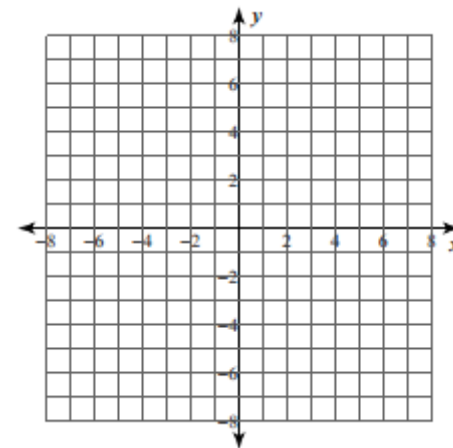
$$f(x) = \begin{cases} |x-3|, & x < 1 \\ (x-1)^4, & x = 1 \\ \sqrt{4x}, & x > 1 \end{cases}$$



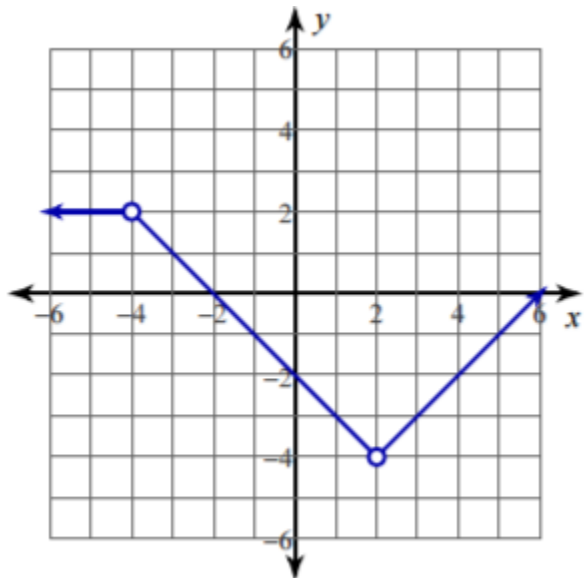
$$f(x) = -2|x-1| + 3$$



$$f(x) = \frac{2}{3}|x| - 1$$



10. Write a rule for the function shown.



In 11 – 12, find the domain and range of each function.

11.
$$f(x) = \begin{cases} -\frac{5}{2}x - 2, & x \leq -2 \\ -x - 5, & x > -2 \end{cases}$$

12.
$$f(x) = \begin{cases} x^2 - 2x - 3, & x < 4 \\ 3x - 7, & x \geq 4 \end{cases}$$