

Name _____

Date _____

8A; Algebra 1

Period _____

Homework

Evaluate the following for $f(x) = \begin{cases} |x|-1, & x > -1 \\ x+3, & x \leq -1 \end{cases}$

1. $f(7)$

2. $f(4)$

3. $f(-3)$

Evaluate the following for $f(x) = \begin{cases} -2|x+1|, & x \leq 1 \\ 3, & 1 < x < 3 \\ 6-2x, & x \geq 3 \end{cases}$

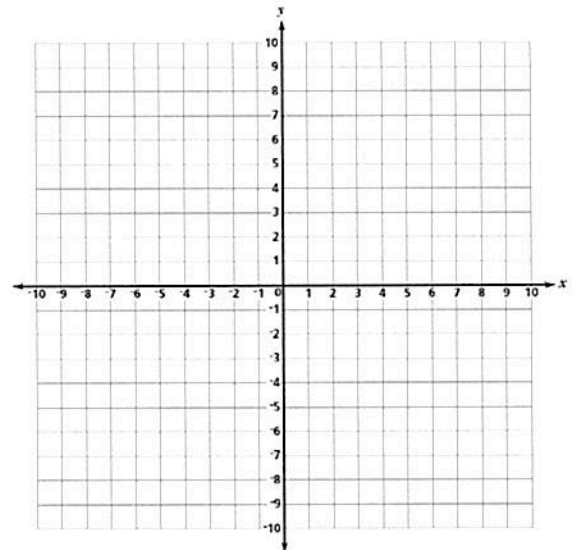
4. $f(10)$

5. $f(2)$

6. $f(0)$

#'s 7-10: Graph the following piecewise. List the domain and the range of the function.

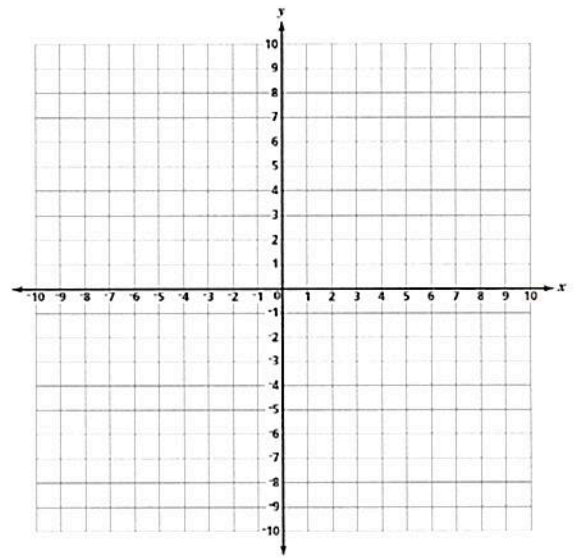
7. $f(x) = \begin{cases} -x + 2, & x < 2 \\ x - 2^x, & x \geq 2 \end{cases}$



Domain: _____

Range: _____

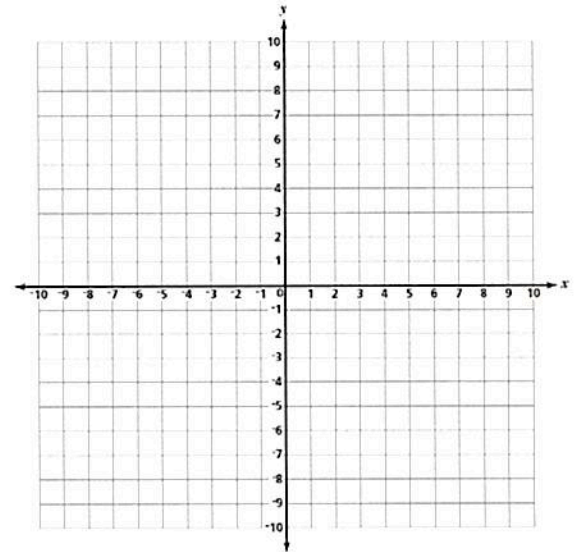
$$8. f(x) = \begin{cases} -3x+2, & x \leq 2 \\ \frac{1}{2}x-4, & x > 2 \end{cases}$$



Domain: _____

Range: _____

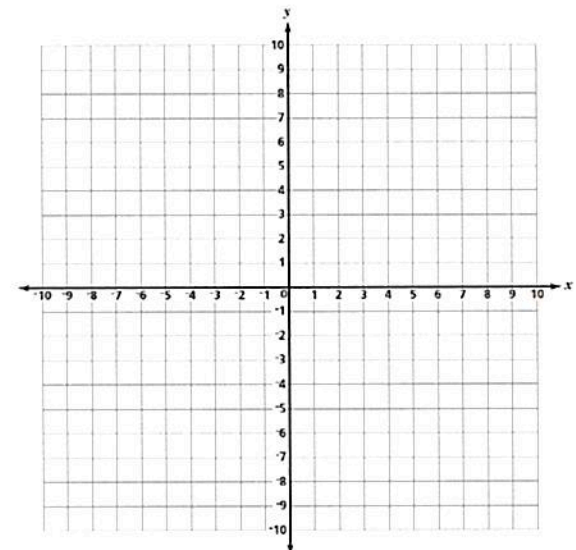
$$9. f(x) = \begin{cases} x^2 - 4, & x < 3 \\ \frac{2}{3}x - 5, & x \geq 3 \end{cases}$$



Domain: _____

Range: _____

$$10. f(x) = \begin{cases} |x|, & -2 \leq x < 0 \\ 1, & x = 0 \\ x^3, & x > 0 \end{cases}$$



Domain: _____

Range: _____