

Algebra 2

2.5 Piecewise Functions Homework

Name: _____ Per: _____ Date: _____

1. Evaluate the following for each function as defined.

$$f(x) = \begin{cases} 5 & \text{if } x < -3 \\ -4 & \text{if } x \geq -3 \end{cases}$$

$$g(x) = \begin{cases} \frac{1}{3}x + 1 & \text{if } x < 3 \\ -3x - 1 & \text{if } x \geq 3 \end{cases}$$

$$h(x) = \begin{cases} -x + 1 & \text{if } x \leq -4 \\ x - 1 & \text{if } -4 < x < 4 \\ -\frac{3}{4}x + 8 & \text{if } x \geq 4 \end{cases}$$

A. $f(-3)$

B. $g(3)$

C. $h(4)$

D. $f(-2)$

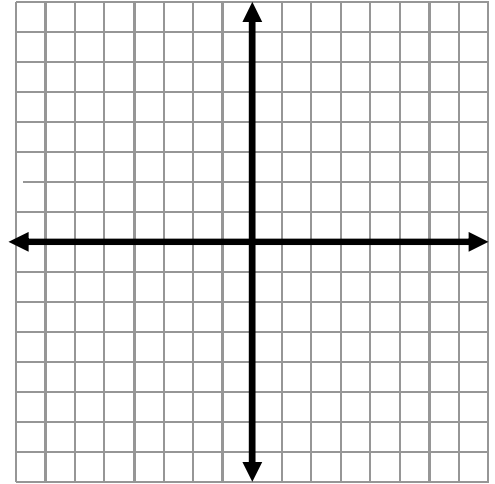
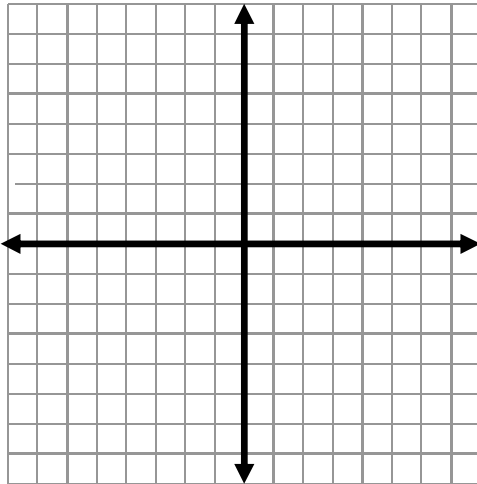
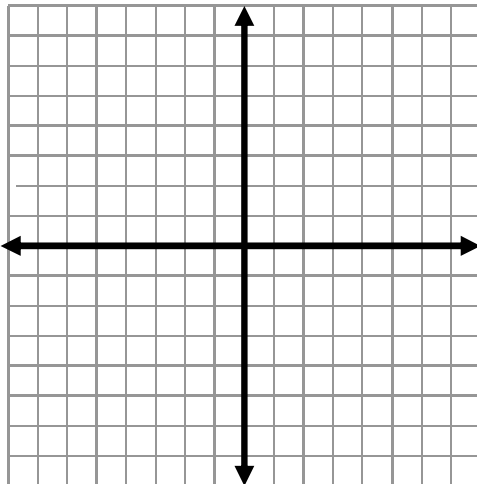
E. $g(4)$

F. $h(0)$

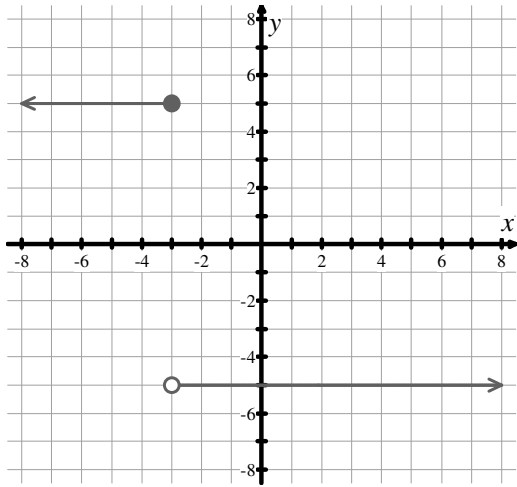
G. $f(-4)$

H. $h(-5)$

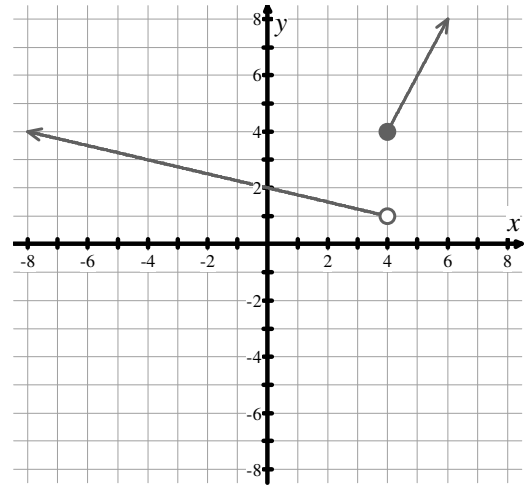
2. Graph the three functions from Exercise 1 above.



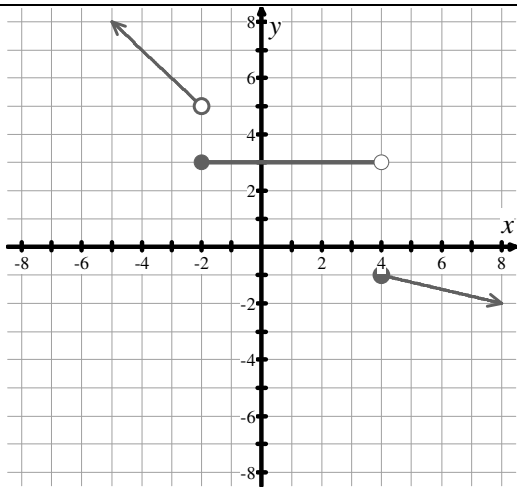
3. Write the equation of the function for each graph below.



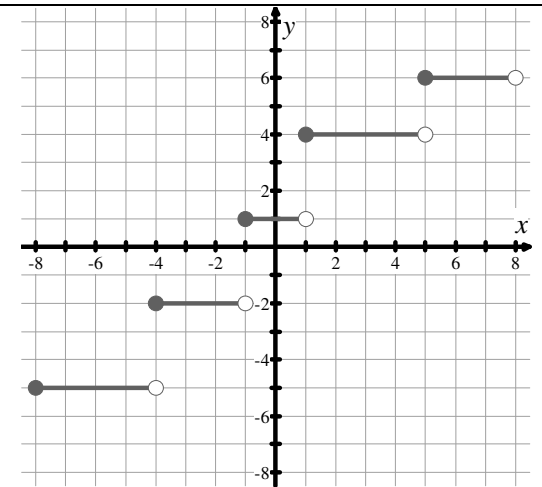
A.



B.



C.



D.