

**Piecewise Function Worksheet**

For problems 1-12, evaluate the function for the given value of  $x$ .

$$f(x) = \begin{cases} 3, & \text{if } x \leq 0 \\ 2, & \text{if } x > 0 \end{cases}$$

$$g(x) = \begin{cases} x+5, & \text{if } x \leq 3 \\ 2x-1, & \text{if } x > 3 \end{cases}$$

$$h(x) = \begin{cases} \frac{1}{2}x-4, & \text{if } x \leq -2 \\ 3-2x, & \text{if } x > -2 \end{cases}$$

1.  $f(2)$

2.  $f(-4)$

3.  $f(0)$

4.  $f\left(\frac{1}{2}\right)$

5.  $g(7)$

6.  $g(0)$

7.  $g(-1)$

8.  $g(3)$

9.  $h(-4)$

10.  $h(-2)$

11.  $h(-1)$

12.  $h(6)$

Graph the function

13.  $f(x) = \begin{cases} 2x-3, & \text{when } x \leq 1 \\ 3x+1, & \text{when } x > 1 \end{cases}$



14.  $f(x) = \begin{cases} x-1, & \text{when } x < 2 \\ 2x+1, & \text{when } x \geq 2 \end{cases}$

