

## Evaluate piecewise functions

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.  $h(6)$

Evaluate the functions for the given value of x.

$$m(x) = \begin{cases} \sqrt{x+7} & x < 3 \\ -x+5 & x \geq 3 \end{cases}$$

$$r(x) = \begin{cases} |2x-1| & x < 0 \\ \frac{1}{3}x-5 & x \geq 0 \end{cases}$$

13.  $m(7)$

14.  $m(2)$

15.  $m(-3)$

16.  $m(3)$

17.  $r(-1)$

18.  $r(0)$

19.  $r(2)$

20.  $r(-14)$