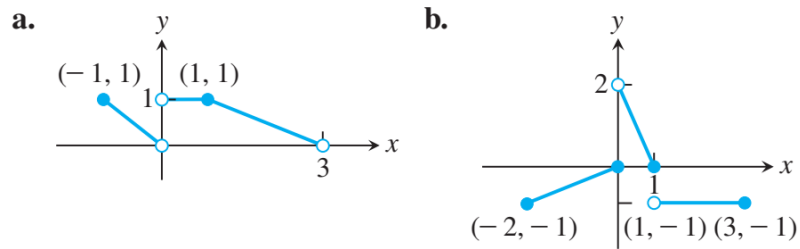


## Exercise 31

Find a formula for each function graphed in Exercises 29–32.



### Solution

$$\mathbf{a.} \quad y = \begin{cases} -x & \text{if } -1 \leq x < 0 \\ 1 & \text{if } 0 < x \leq 1 \\ -\frac{1}{2}(x-3) & \text{if } 1 \leq x < 3 \end{cases}$$

$$\mathbf{b.} \quad y = \begin{cases} \frac{1}{2}x & \text{if } -2 \leq x \leq 0 \\ 2-2x & \text{if } 0 < x \leq 1 \\ -1 & \text{if } 1 < x \leq 3 \end{cases}$$