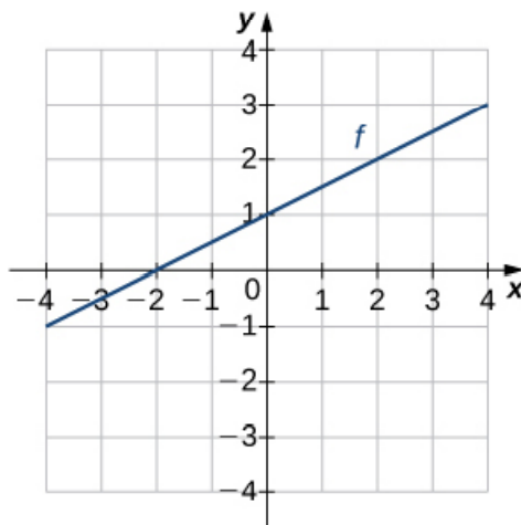


Exercise 195

For the following exercises, use the graph of f to sketch the graph of its inverse function.



Solution

The function graphed in the figure is

$$f(x) = \frac{1}{2}x + 1.$$

To find the inverse function, replace x with y and replace $f(x)$ with x .

$$x = \frac{1}{2}y + 1$$

Solve for y .

$$x - 1 = \frac{1}{2}y$$

$$y = 2(x - 1)$$

Both functions are plotted together versus x below. Notice that they are reflections of each other across the line $y = x$.

