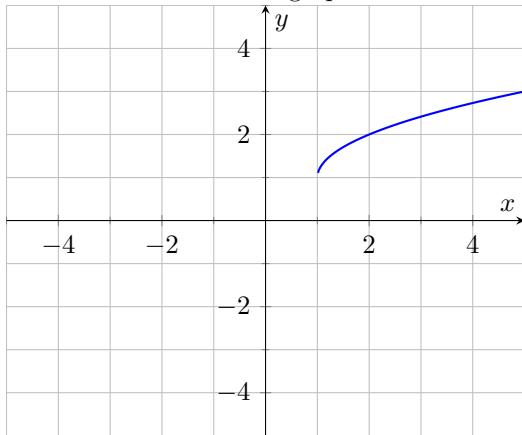


1. Match the function's graph with the correct formula for  $f(x)$ .



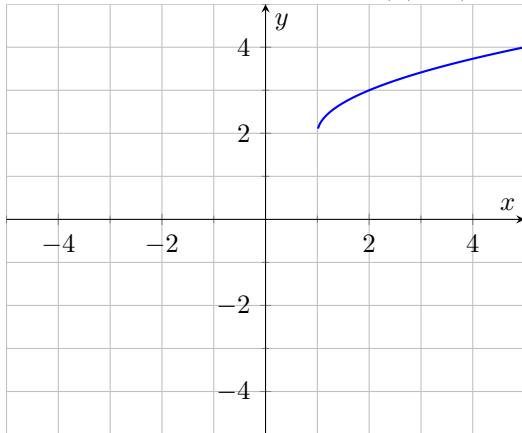
A.  $f(x) = \sqrt{x+1} - 1$

B.  $f(x) = \sqrt{x+1} + 1$

C.  $f(x) = \sqrt{x-1} - 1$

D.  $f(x) = \sqrt{x-1} + 1$

2. Consider the basic function  $f(x) = \sqrt{x}$ . Choose the transformation of  $f(x)$  which gives the graph below.



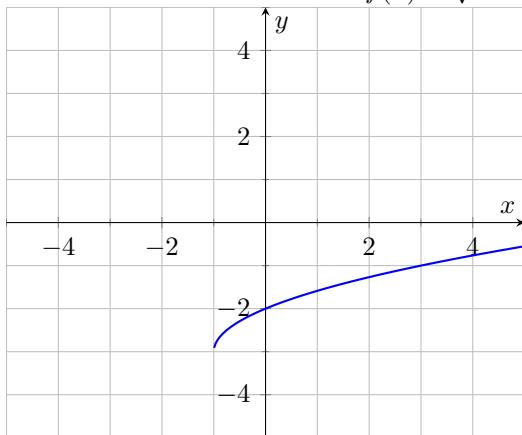
A.  $f(x+1) + 2$

B.  $f(x-1) + 2$

C.  $f(x+1) - 2$

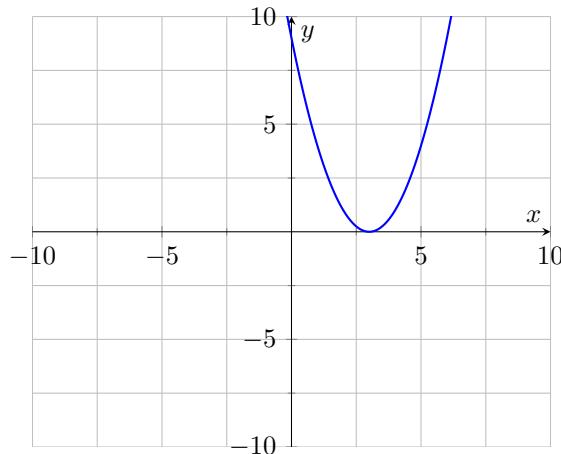
D.  $f(x-1) - 2$

3. Consider the basic function  $f(x) = \sqrt{x}$ . Choose the transformation of  $f(x)$  which gives the graph below.



- A.  $f(x + 1) + 3$
- B.  $f(x - 1) - 3$
- C.  $f(x - 1) + 3$
- D.  $f(x + 1) - 3$

4. Match the function graph with its formula. Use the shape of the graph of the function and your knowledge of translations to make your choices.



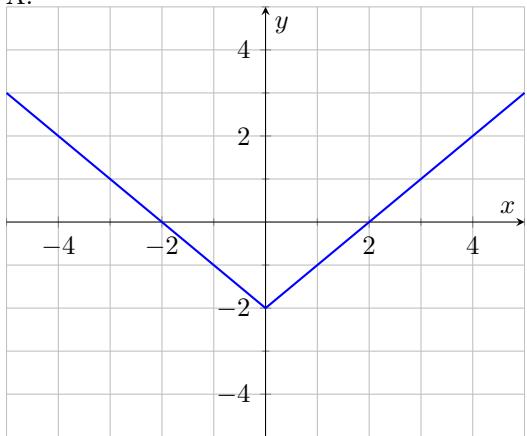
- A.  $f(x) = (x - 3)^2$
- B.  $f(x) = (x - 4)^2$
- C.  $f(x) = x - 1$
- D.  $f(x) = \sqrt[3]{x} + 5$
- E.  $f(x) = \sqrt[3]{x + 5}$



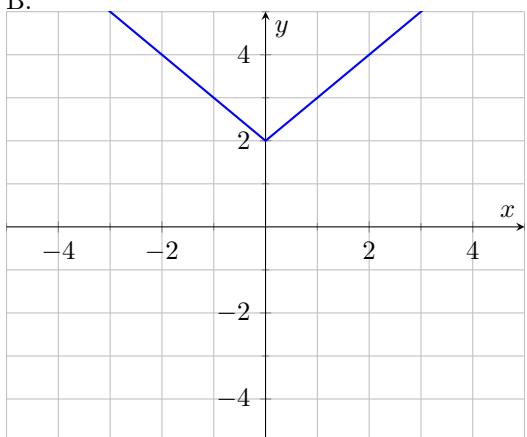
5. Match the function  $f(x)$  with its graph.

$$f(x) = |x - 2|$$

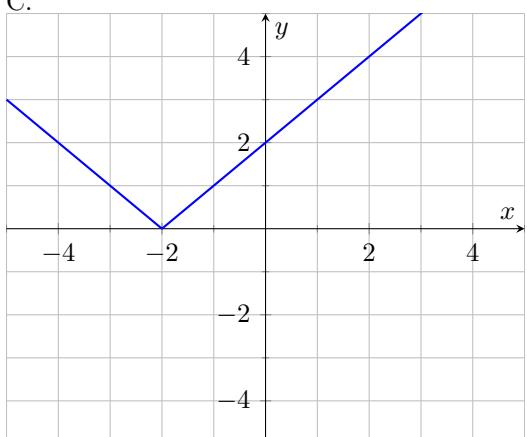
A.



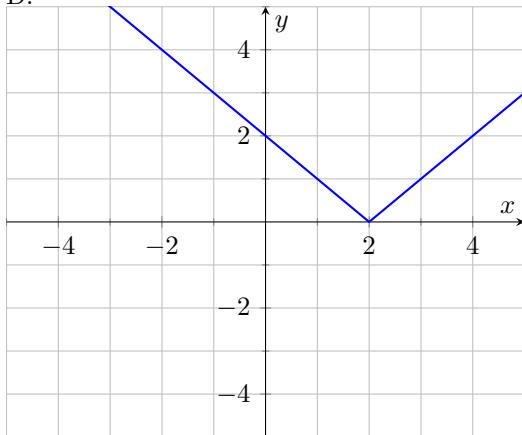
B.



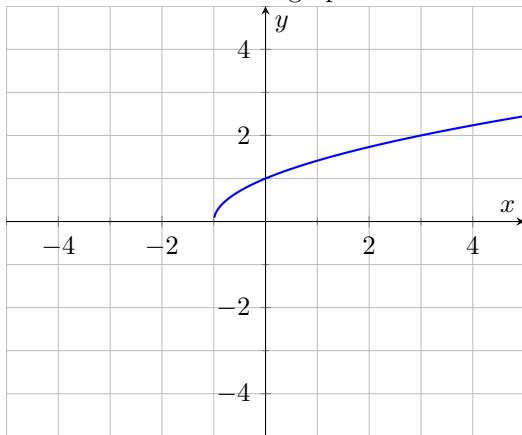
C.



D.



6. Match the function's graph with the correct formula for  $f(x)$ .



A.  $f(x) = \sqrt{x} + 1$

B.  $f(x) = \sqrt{x + 1}$

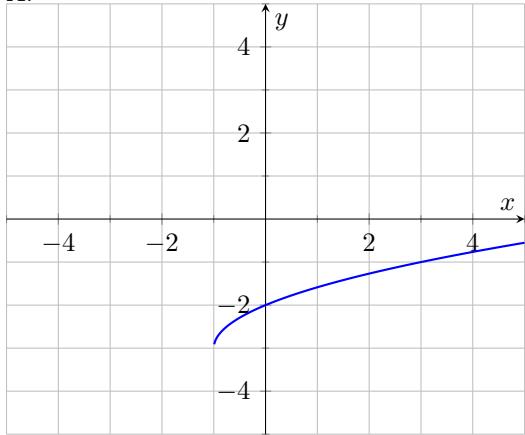
C.  $f(x) = \sqrt{x - 1}$

D.  $f(x) = \sqrt{x} - 1$

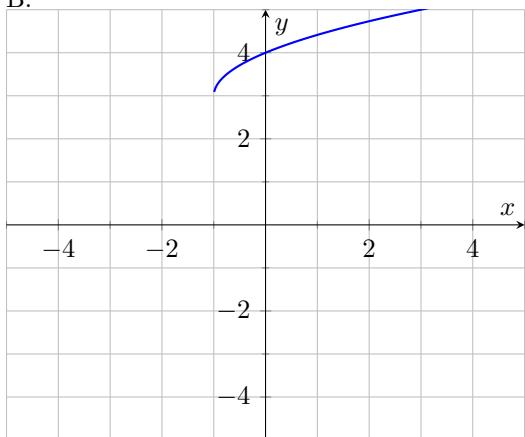
7. Match the function  $f(x)$  with its graph.

$$f(x) = \sqrt{x - 1} + 3$$

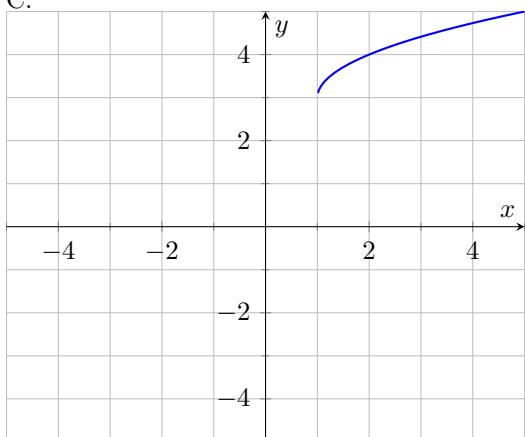
A.



B.



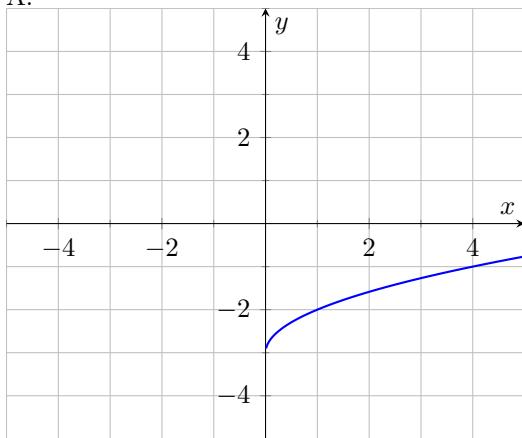
C.



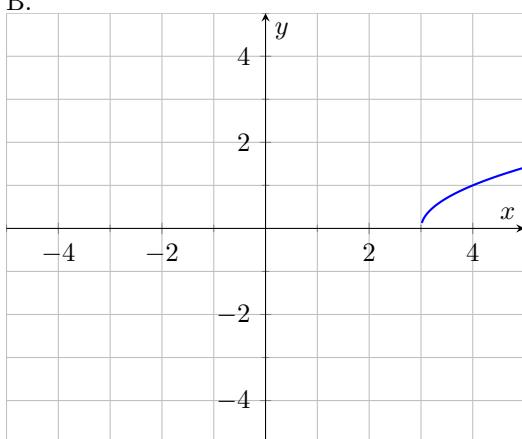
8. Match the function  $f(x)$  with its graph.

$$f(x) = \sqrt{x} - 3$$

A.



B.



C.

