

5. [8 points] The graph of the function f defined on the domain $[0, 4]$ is drawn below in Figure A.

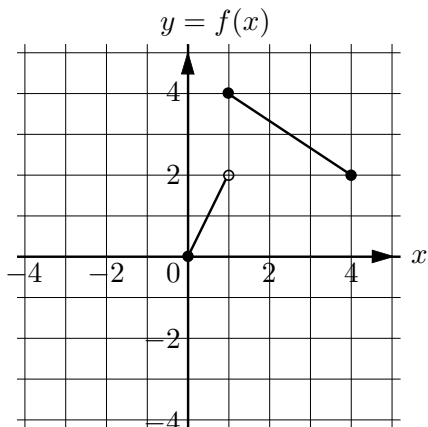


Figure A

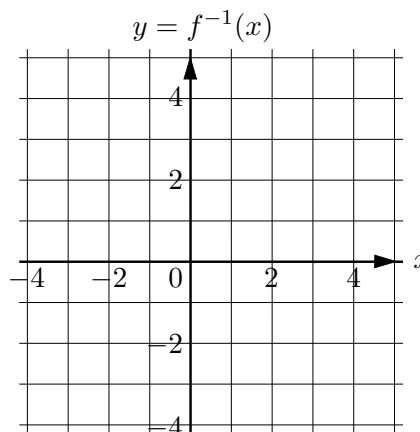


Figure B

- a. [4 points] Sketch the graph $y = f^{-1}(x)$ in Figure B.
- b. [4 points] Write down a piecewise formula for the function f .

$$f(x) = \begin{cases} \text{_____} & \text{_____} \\ \text{_____} & \text{_____} \end{cases}$$

6. [6 points] Let g be a function defined on the real line. Some values of g are shown below.

x	0	1	2	3
$g(x)$	0	5	6	7

- a. [2 points] If g were an odd function, what should the value of $g(-1)$ be?

$g(-1) = \text{_____}$

- b. [2 points] If g were a periodic function of period 5, what should the value of $g(-3)$ be?

$g(-3) = \text{_____}$

- c. [2 points] Let k be the function defined by $k(x) = g(2x + 5)$. What is $k(-1)$?

$k(-1) = \text{_____}$