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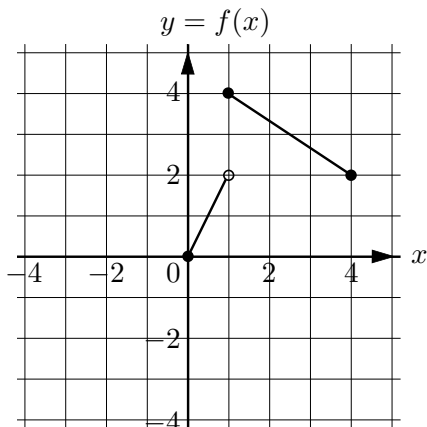

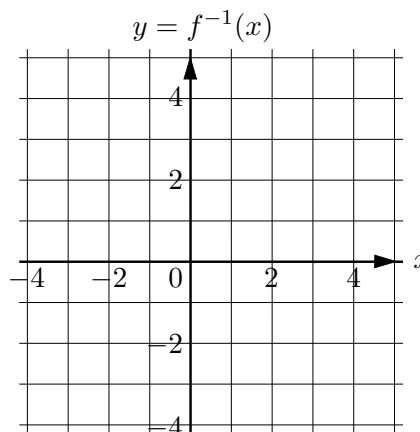$y = f(x)$

Figure A

$y = f^{-1}(x)$

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.

$$f(x) = \begin{cases} \underline{\hspace{3cm}} & \underline{\hspace{3cm}} \\ \\ \underline{\hspace{3cm}} & \underline{\hspace{3cm}} \end{cases}$$

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?

    $g(-1)=$\underline{\hspace{3cm}}

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

    $g(-3)=$\underline{\hspace{3cm}}

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

    $k(-1)=$\underline{\hspace{3cm}}