x	$f(x)$
-1	5
2	-4
3	-6
5	-11

1. The continuous function $f(x)$ is **odd** and decreasing with selected values shown in the table above. Use the table to find the following.

a) $f(-2) =$ b) $f(1) =$ c) If $f(x) = 11$ then $x =$

d) Find the average rate of change of $f(x)$ over the interval $-3 \leq x \leq 5$.

x	$g(x)$
-5	-9
-2	-7
-1	c
a	7
5	b

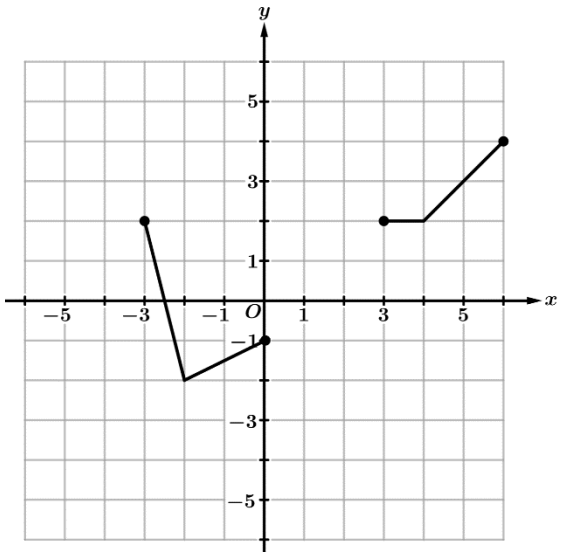
2. The continuous function $g(x)$ is **odd** and increasing with selected values shown in the table above.

a) Find the values of a and b.

b) If the average rate of change of $g(x)$ over the interval $[-1, 5]$ is 2 find the value of c.

x	-4	-2	-1	1	b	4
$h(x)$	a	8	$a+b$	c	8	7

3. Let $h(x)$ be an **even** function with selected values shown in the table above. Find the values of $a, b,$ and c.



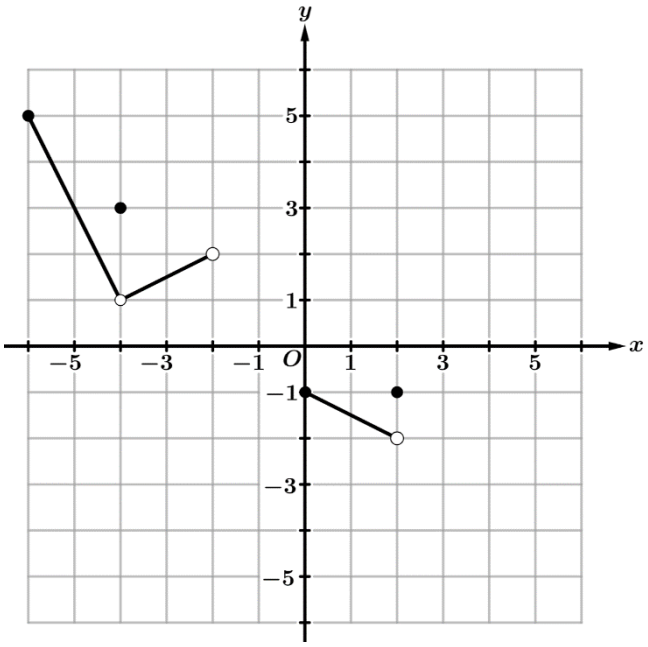
Graph of k

4. The function k is an **even** function with domain $-6 \le x \le 6$. A portion of the graph of k is shown above with the portions from $-6 \le x \le -3$ and $0 \le x \le 3$ missing from the graph. Use the graph to find the following.

a) $k(-5) =$ b) $k(-4) =$ c) $k(2) =$

d) Find the average rate of change of k over the interval $[-6, 6]$.

e) On the graph above, draw the missing portions for the graph of k.



Graph of g

5. The function g is an **odd** function with domain $-6 \le x \le 6$. A portion of the graph of g is shown above with parts of the graph missing. Use the graph to find the following.

a) $g(5) =$ b) $g(-1) =$ c) $g(-2) =$ d) $g(4) =$

$f(x) = x^2 + 3x$ $h(x) = 3x - 5$ $k(x) = x^3 + x^2 + 7x$ $p(x) = x^5 + 4x^3$

6. Equations for the functions f, h, k, and p are shown above. Use these equations to determine if the following functions are even, odd, or neither. Show the work that leads to your answer.

a) $y = f(x) - h(x)$ b) $y = k(x) - f(x)$

c) $y = p(x) - 10x$ d) $y = p(x) + f(x)$