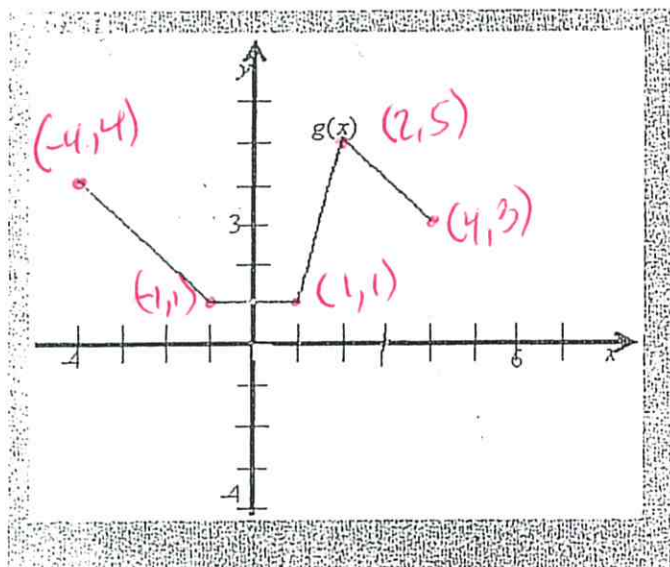
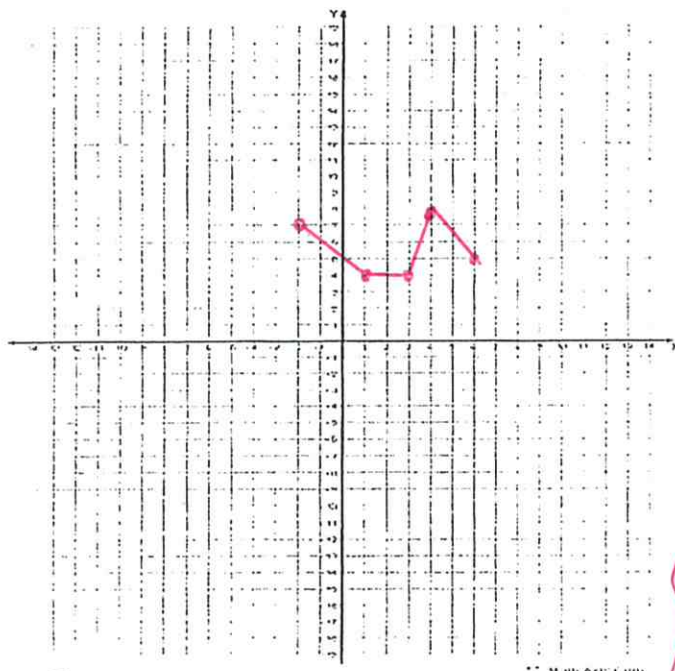


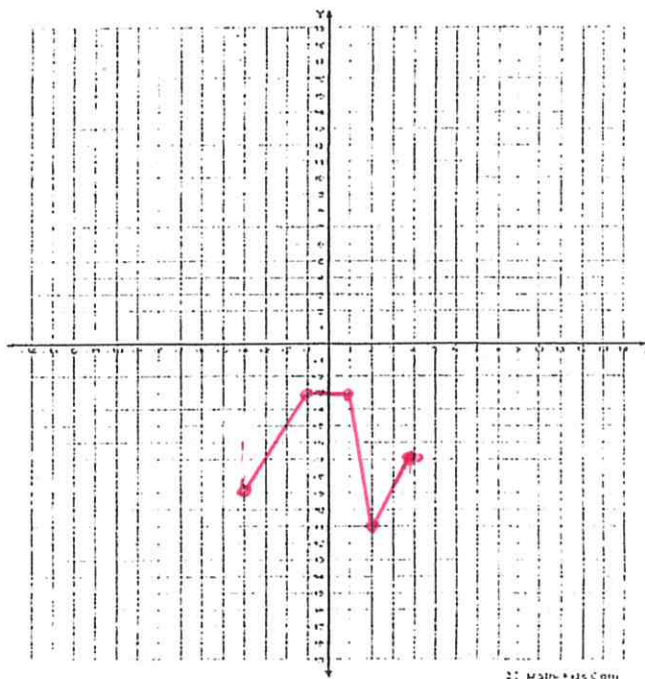
Using the arbitrary graph of $y = g(x)$, describe the transformations and sketch a graph of the transformed function.



1. $y = f(x-2) + 3$



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



Show the parent table, the a/b table, the h/k table, with proper column labels.

x	$f(x)$	$x+2$	$f(x)+3$
-4	4	-2	7
-1	1	1	4
1	1	3	4
2	5	4	8
4	3	6	6

Translation
2R, 3U

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

x	$-2f(x)$
-4	-8
-1	-2
1	-2
2	-10
4	-6

Vertical Stretch
of 2
Vertical Reflection

x	$f(x)-1$
-4	-9
-1	-3
1	-3
2	-11
4	-7

Translation
1D