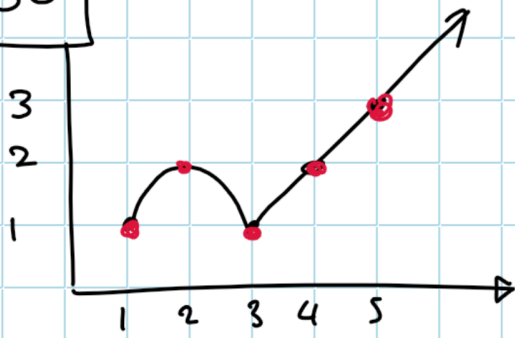


1.3.56



} turn these 5 points into a table for f.

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

$$1 - 3f\left(\frac{2x}{5} - 2\right)$$

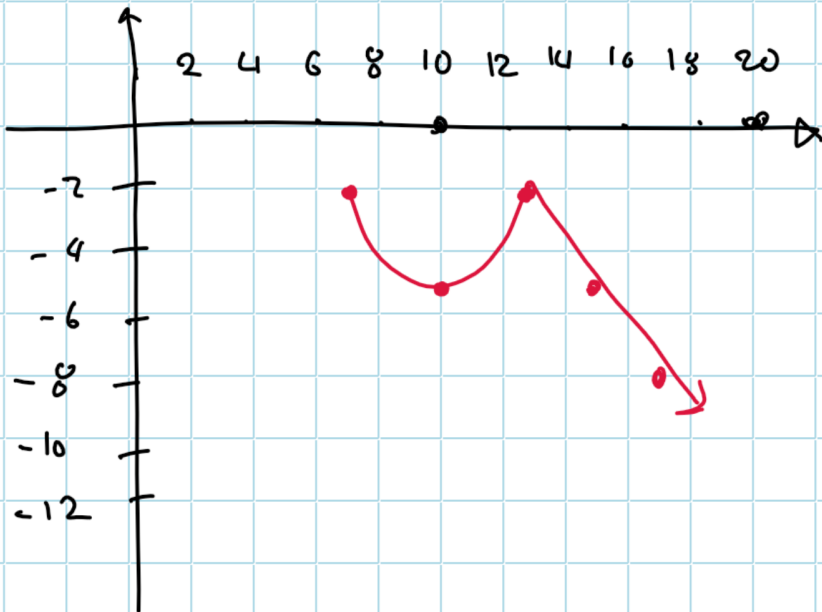
Rewrite this as  $1 - 3f\left(\frac{2}{5}(x-5)\right)$

How do we obtain from f(x)? By applying transformations to f.

v scale -3      v shift +1      h scale  $\frac{2}{5}$       h shift 5

x	f(x)	x	-3f(x)	x	1 - 3f(x)	x	1 - 3f( $\frac{2}{5}x$ )	x	1 - 3f( $\frac{2}{5}(x-5)$ )
1	1	1	-3	1	-2	$\frac{5}{2}$	-2	$\frac{5}{2}$	-2
2	2	2	-6	2	-5	5	-5	10	-5
3	1	3	-3	3	-2	$\frac{15}{2}$	-2	$\frac{25}{2}$	-2
4	2	4	-6	4	-5	10	-5	15	-5
5	3	5	-9	5	-8	$\frac{25}{2}$	-8	$\frac{35}{2}$	-8

*Notes: Yellow arrows point from x=5 in the 4th and 5th columns to x=10 and x=15 in the 8th and 9th columns respectively. Text next to arrows: "this is 2 \* 5/2" and "this is 5+5".*



solution using tables courtesy Miriam HB