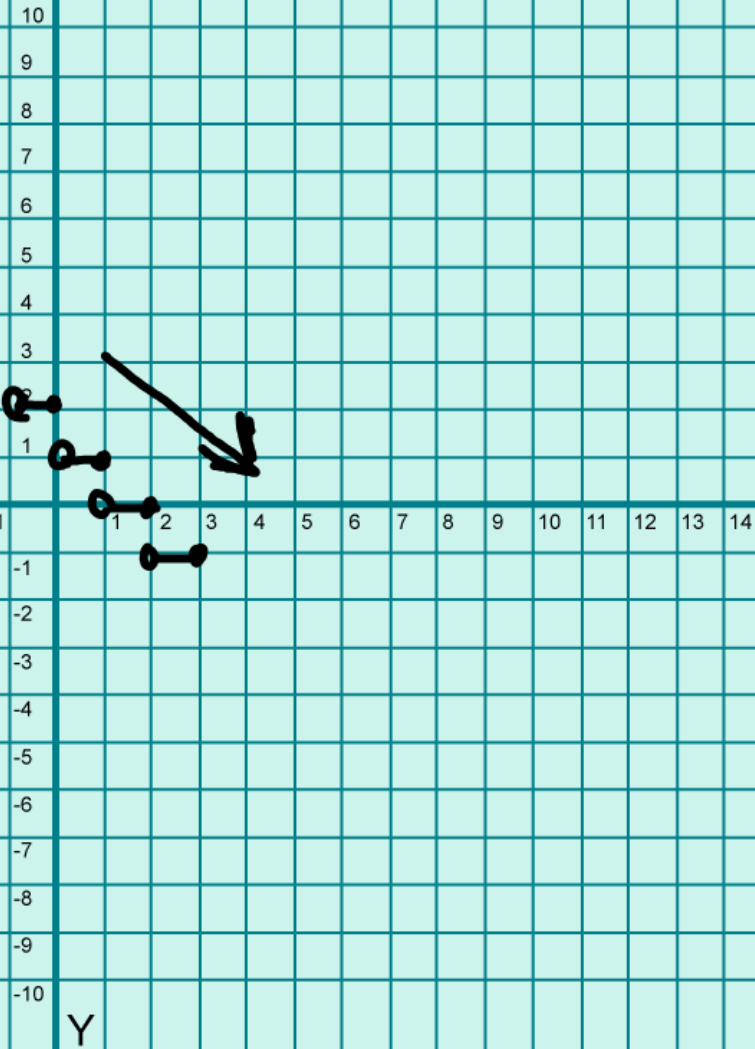


$$f(x) = 2 - \lceil x \rceil$$

x	$\lceil x \rceil$	$2 - \lceil x \rceil$
0	0	2
0.1	1	1
0.2	1	1
0.5	1	1
0.9	1	1
1	1	1
1.1	2	0
1.2	2	0
1.9	2	0
2	2	0
2.1	3	-1
2.2	3	-1



2.7 Transformations

Slide Translation -
Flip Reflection -
Turn Rotation

} Rigid

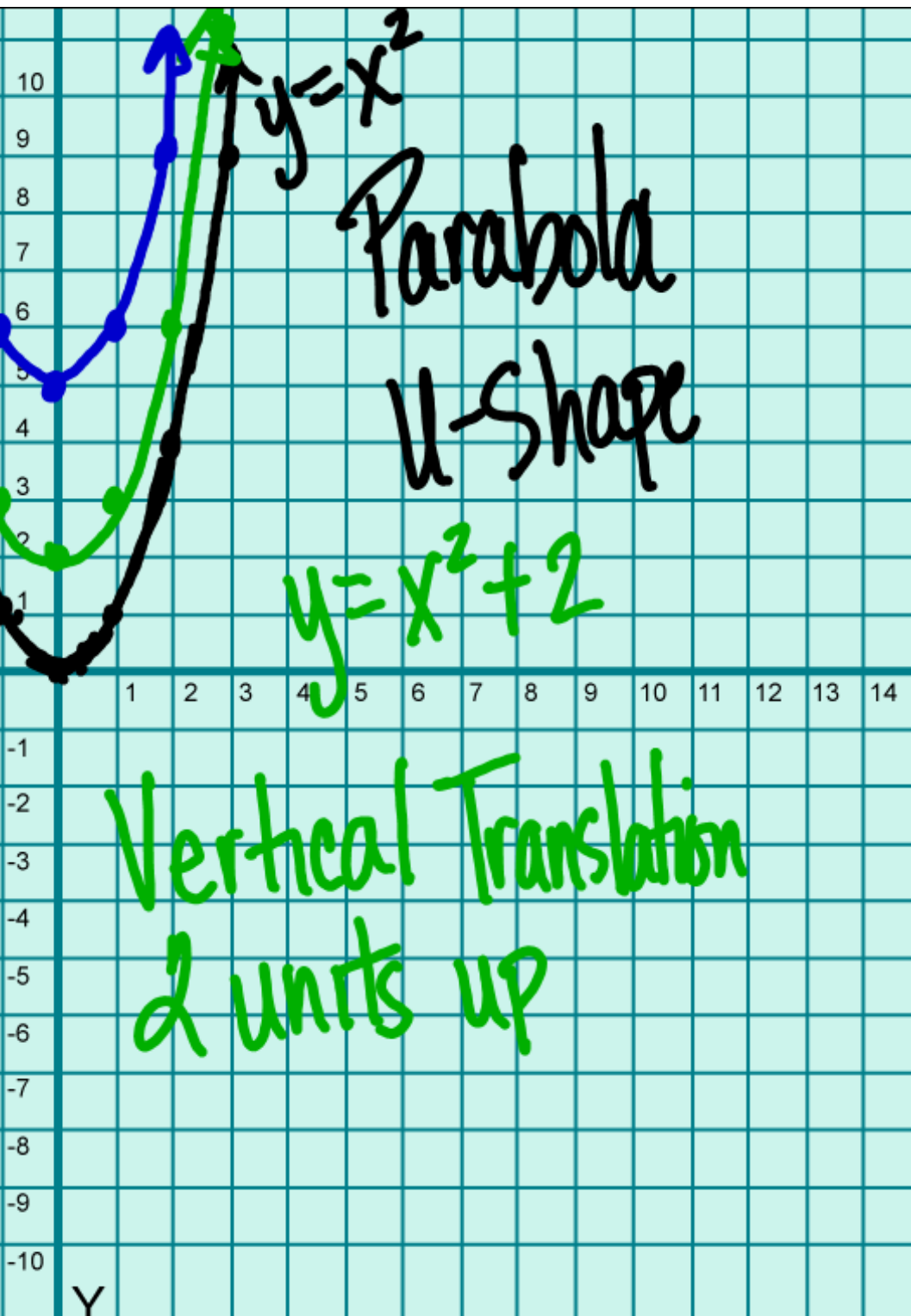
Stretch
Compression

} Non Rigid

Parent function

$$f(x) = x^2$$

X	x^2	$y = x^2 + 2$
-3	9	11
-2	4	6
-1	1	3
0	0	2
1	1	3
2	4	6
3	9	11



$$f(x) = x^2$$

$$y = f(x) + k$$

$k > 0$
positive

$$y = x^2 + k$$

$$y = x^2 + 2$$

Vertical Translation
2 units up

$$y = x^2 + 5$$

Vertical Translation
5 units up.

$$y = x^2 + 8$$

Vertical Translation
8 units up