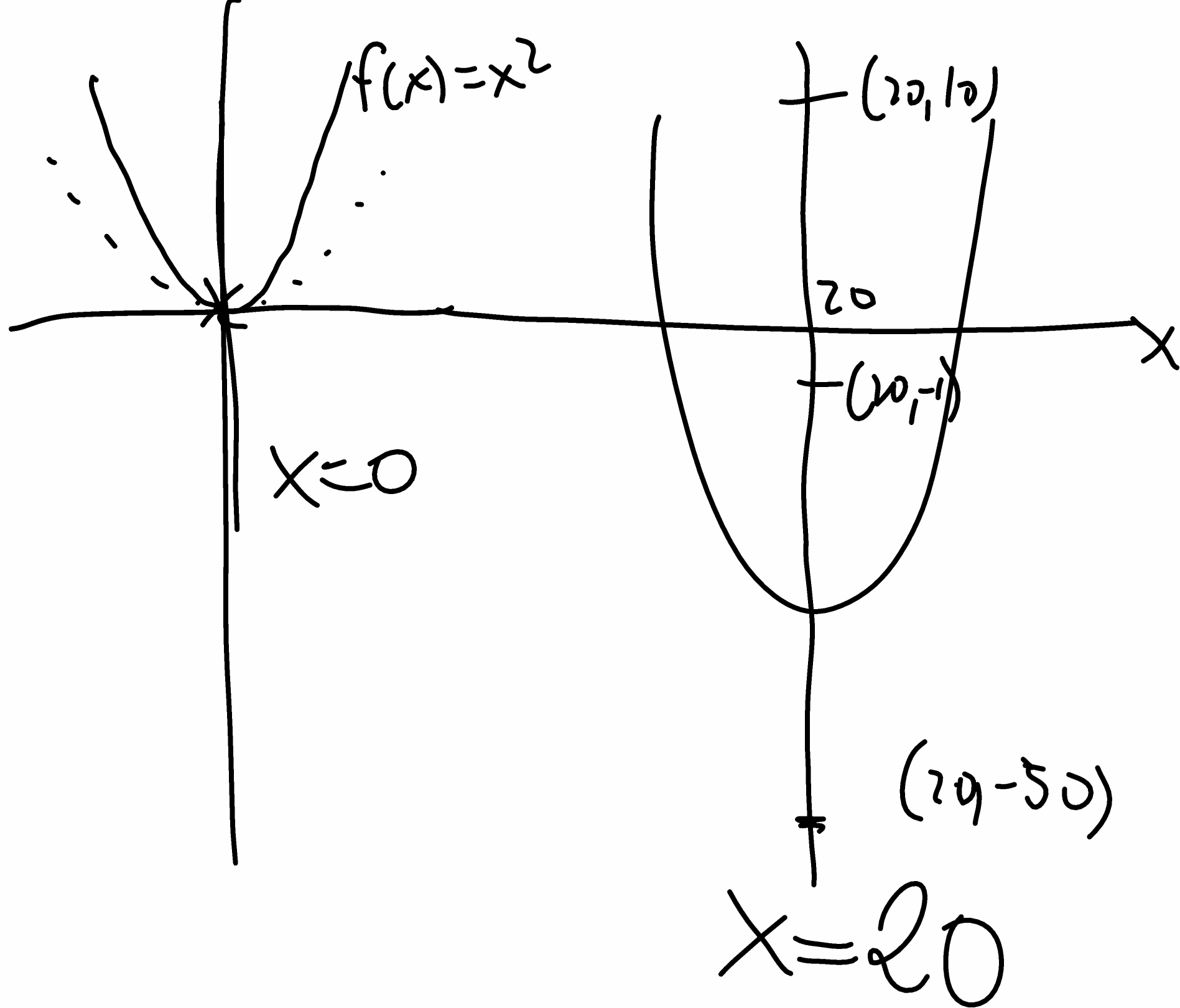


EXPLORING TRANSFORMATIONS OF QUADRATIC FUNCTIONS

Thu 22 Nov 2018

<u>Review</u> Function	$k?$	$a?$	$h?$	Direction of opening	Vertex	Axis Symmetry	Congruent to $g(x) = x^2$
$f(x) = x^2$	0	1	0	up	(0,0)	$x=0$	Yes
$f(x) = x^2 + 2$	2	1	0	up	(0,2)	$x=0$	Yes
$f(x) = x^2 - 1$	-1	1	0	up	(0,-1)	$x=0$	Yes
$f(x) = 2x^2$	0	2	0	up	(0,0)	$x=0$	Yes
$f(x) = -0.5x^2$	0	-0.5	0	Down	(0,0)	$x=0$	NO



$$f(x) = a(x-h)^2 + k$$

$$a=1 \text{ \& } h=0 : f(x) = x^2 + k$$

$$f(x) = 0.5(x+1)^2 - 3$$

a	h	k	UP/down	Vertex	Axis symmetry	$\sim x^2$
0.5	-1	-3	up	$(-1, -3)$	$x = -1$	Yes