

Name _____
Date _____

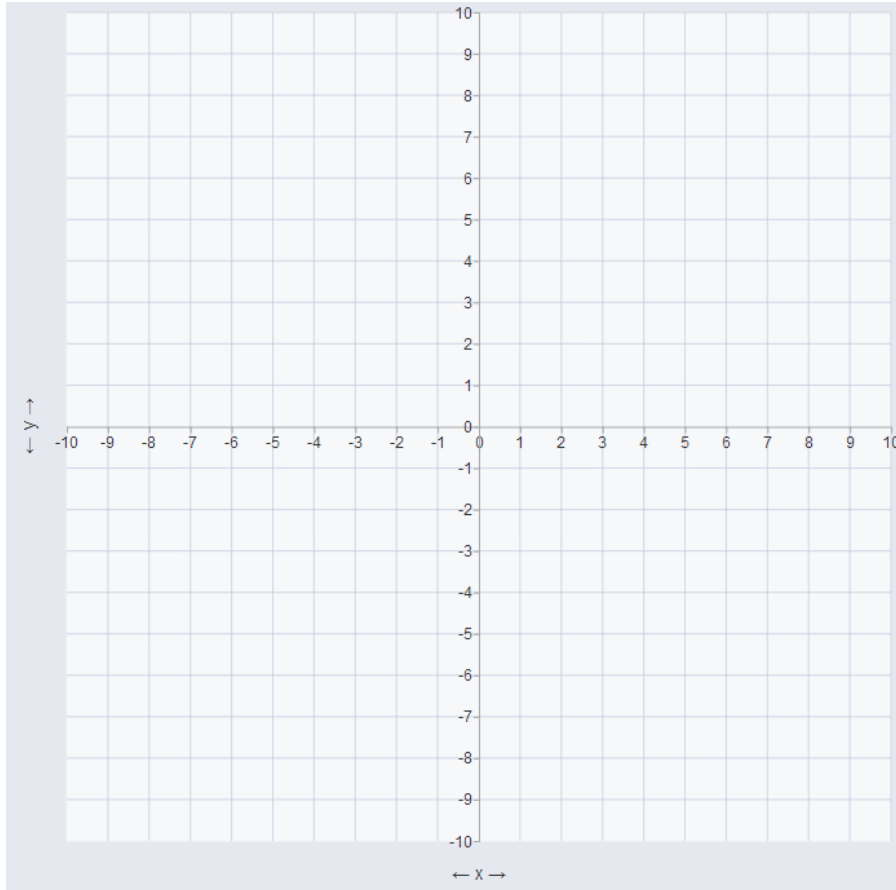
Quadratic Functions in Vertex Form
Check-In Worksheet

1. Complete the following using the function $f(x) = -(x + 2)^2 + 5$

- a) Find the vertex. b) Fill in the following table. Make sure to put your vertex in the center.

x	$-(x + 2)^2 + 5$	$f(x)$	$(x, f(x))$

- c) Graph the function.



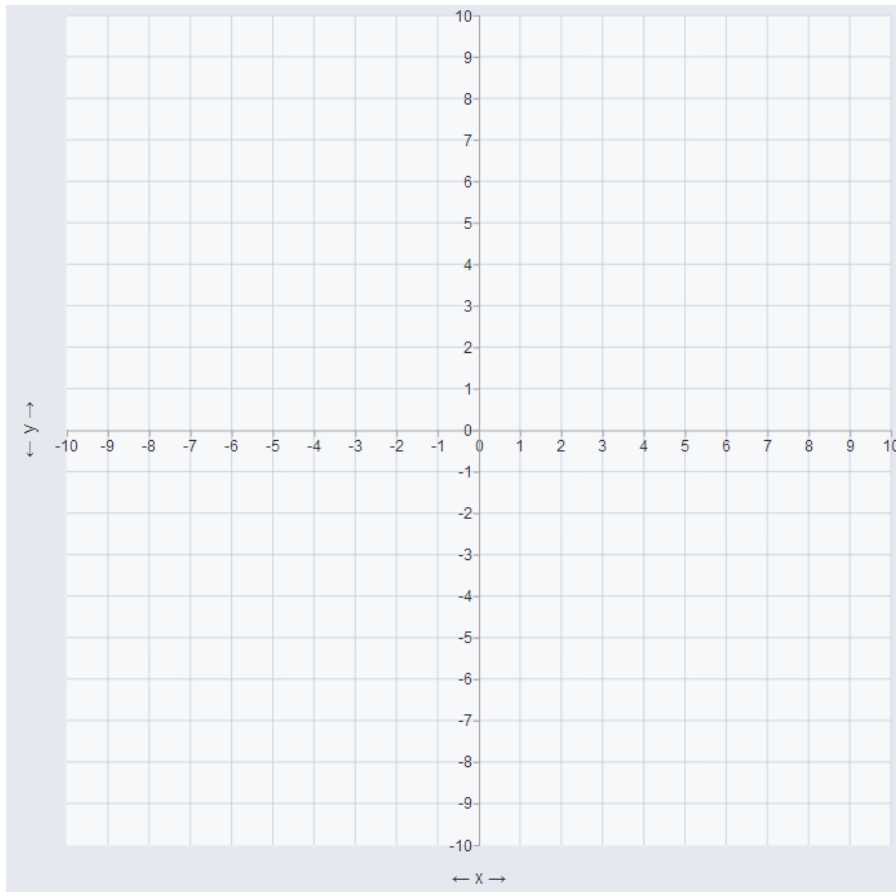
2. Complete the following using the function $f(x) = 2(x - 1)^2 - 7$

a) Find the vertex.

b) Fill in the following table. Make sure to put your vertex in the center.

x	$2(x - 1)^2 - 7$	$f(x)$	$(x, f(x))$

c) Graph the function



Answer Key:

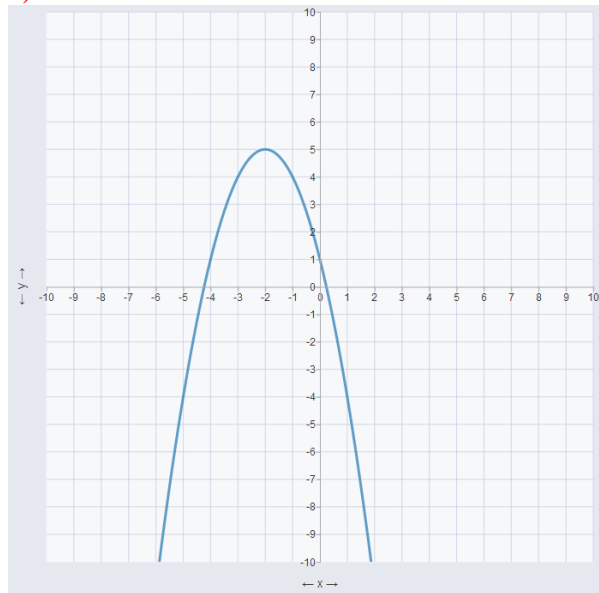
1.

a) $(-2, -5)$

b)

x	$-(x + 2)^2 + 5$	$f(x)$	$(x, f(x))$
-4	$-(-4 + 2)^2 + 5$	1	$(-4, 1)$
-3	$-(-3 + 2)^2 + 5$	4	$(-3, 4)$
-2	$-(-2 + 2)^2 + 5$	5	$(-2, 5)$
-1	$-(-1 + 2)^2 + 5$	4	$(-1, 4)$
0	$-(0 + 2)^2 + 5$	1	$(0, 1)$

c)



2.

a) $(-1, 9)$

b)

x	$2(x - 1)^2 - 7$	$f(x)$	$(x, f(x))$
-1	$2(-1 - 1)^2 - 7$	1	$(-1, 1)$
0	$2(0 - 1)^2 - 7$	-5	$(0, -5)$
1	$2(1 - 1)^2 - 7$	-7	$(1, -7)$
2	$2(2 - 1)^2 - 7$	-5	$(2, -5)$
3	$2(3 - 1)^2 - 7$	1	$(3, 1)$

c)

