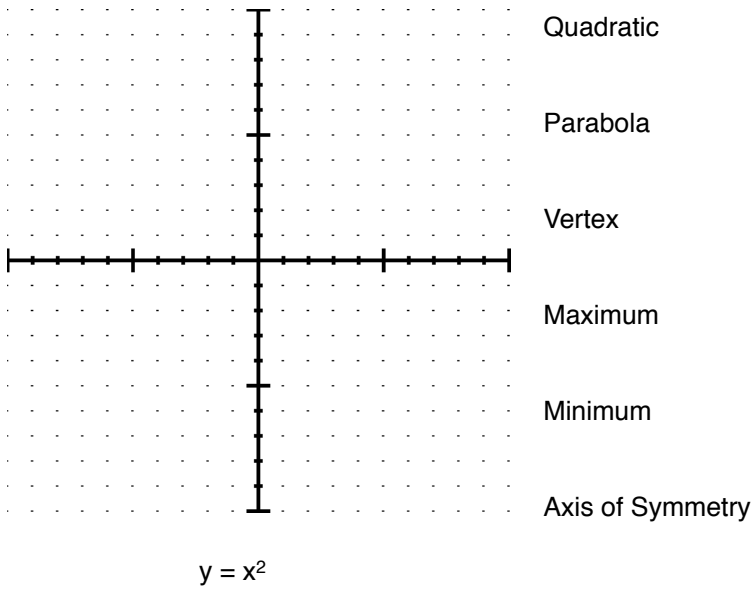


Intro and Vocab



x	-2	-1	0	1	2
y					

Recall #1: When plugging in a negative value, always use parentheses!

Recall #2: $(5)^2 = 25$ $(-5)^2 = 25$ $-(5)^2 = -25$ $-(-5)^2 = -25$

Graphing by Table / Observations

For each quadratic below:

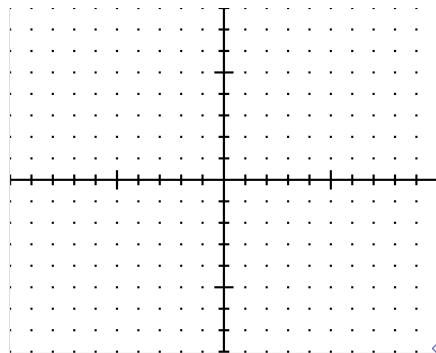
- (a) Make a table of values (at least 5 values)
- (b) Draw the parabola (at least 5 connected points with arrows!)
- (c) Describe how the graph compares to the parent function ($y = x^2$). Pay special attention to the equation!

1) $y = x^2 + 4$

(a)

(b)

(c)

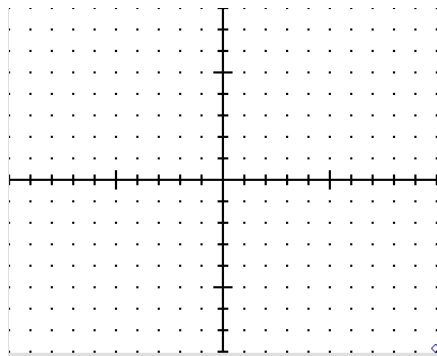


2) $y = 2x^2 - 3$

(a)

(b)

(c)

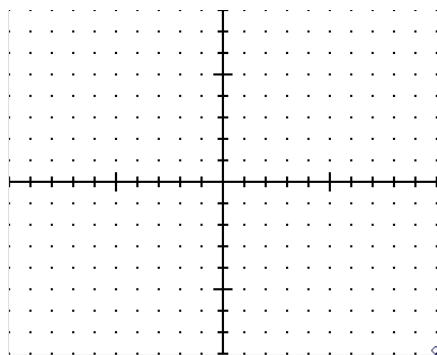


3) $y = -x^2 + 2$ *Hint: You should get (-1, 1) as a solution, not (-1, 3)*

(a)

(b)

(c)



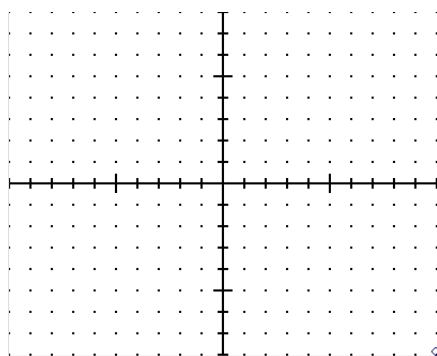
4) $y = -\frac{1}{3}x^2 + 6$

Hint: Because the denominator is 3, try x values that are multiples of 3

(a)

(b)

(c)

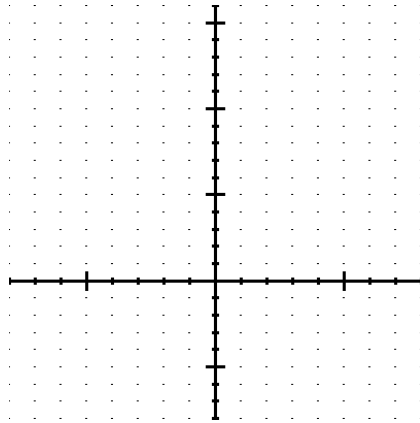


5) $y = \frac{3}{2}x^2 - 8$

(a)

(b)

(c)

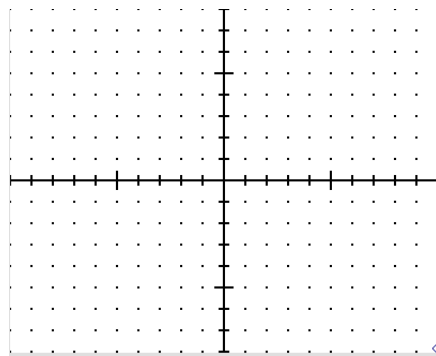


6) $y = -3x^2 + 7$

(a)

(b)

(c)



Summary

A) Describe how the values of a and c effect the graph of the parent function in the equation $y = ax^2 + c$,

B) Describe the graphs of each of the following (use what you concluded in part A).

i) $y = x^2 + 3$

ii) $y = -x^2 - 5$

iii) $y = \frac{5}{2}x^2$