



Math Virtual Learning

# Algebra 1 S2

April 14th, 2020



Algebra 1 S2  
Lesson: April 14th, 2020

**Learning Target:**  
**Students will identify a quadratic function from a graph,  
equation and table**  
Part 2



Bell Ringer:

**Factor the quadratic equations.**

A)  $3x^2 - 6x - 9$

B)  $5x^2 + 13x - 6$

# Answer to Bellringer Part A

$$3x^2 - 6x - 9$$

GCF  $\rightarrow 3(x^2 - 2x - 3)$

$3(\overset{\textcircled{1}}{1}x^2 + \overset{\textcircled{-2}}{-2}x + \overset{\textcircled{-3}}{-3})$   
 $a=1$     $b=-2$     $c=-3$

$a \cdot c = 1 \cdot (-3) = -3$

$1$     $-3$   
 $-2$     $-3$   
 $b = -2$

What multiplies to make  $-3$ ?

$\overset{\textcircled{1 \cdot -3}}{1 \cdot -3} \rightarrow 1 + -3 = -2$   
 $-1 \cdot 3$   
our "b" value

$\downarrow$

GCF  $3(x+1)(x-3)$

## Answer to Bellringer Part B

$$5x^2 + 13x - 6$$

no GCF

$$\textcircled{5}x^2 + \textcircled{13}x - \textcircled{6}$$

$a=5$     $b=13$     $c=-6$

$ac = 5 \cdot -6 = -30$

<del>-2</del>	<del>15</del>
<del>13</del>	<del>13</del>

$b=13$

Factors of -30

$2 \cdot -15$

$\textcircled{-2 \cdot 15} \rightarrow -2 + 15 = 13$  our "b" value

$\frac{-2}{a \rightarrow 5} = \frac{-2}{5}$  and  $\frac{15}{a \rightarrow 5} = \frac{3}{1}$

$(5x - 2)(1x + 3)$



Today our main focus will be identifying whether a table of values is quadratic or not. However, the tables we will work with today will be a bit more challenging.

Check out the [video lesson/practice](#) to get started!

The practice problems in the video are found [here](#).

Let's try a few:  
*Determine if the tables below are quadratic:*

1.

x	y
-1	4
0	1
1	4
2	13
3	28

2.

x	y
2	5
4	7
6	11
8	17
10	25

Let's try a few:  
*Determine if the tables below are quadratic:*

3.

x	y
5	5
6	7
7	9
8	11
9	13

4.

x	y
-3	60
-2	56
-1	48
0	36
1	20



Let's try a few:  
***Determine if the tables below are quadratic:***

5.

x	y
-4	11
-2	-1
0	-5
2	-1
4	11

6.

x	y
5	1
6	2
7	3
8	5
9	8

Let's try a few:  
***Determine if the tables below are quadratic:***

7.

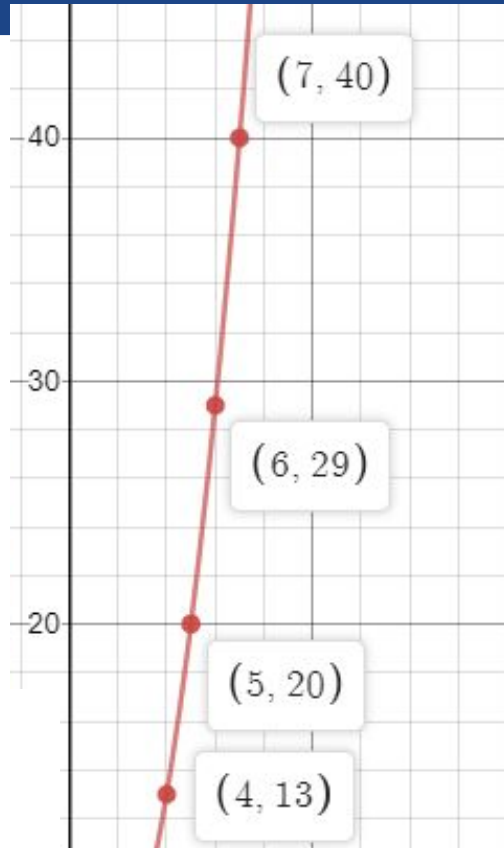
x	y
5	13
6	11
7	7
8	1
9	-7

8.

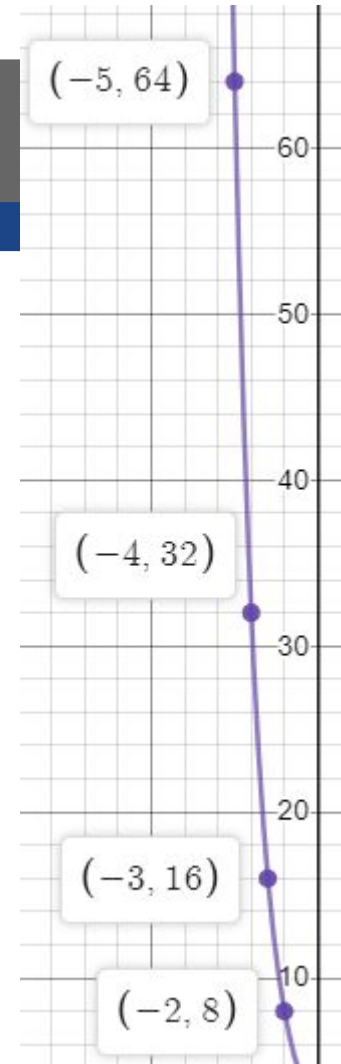
x	y
1	500
2	250
3	125
4	62.5
5	31.25

Use the graphs below to determine if it is a quadratic function:

**A)**

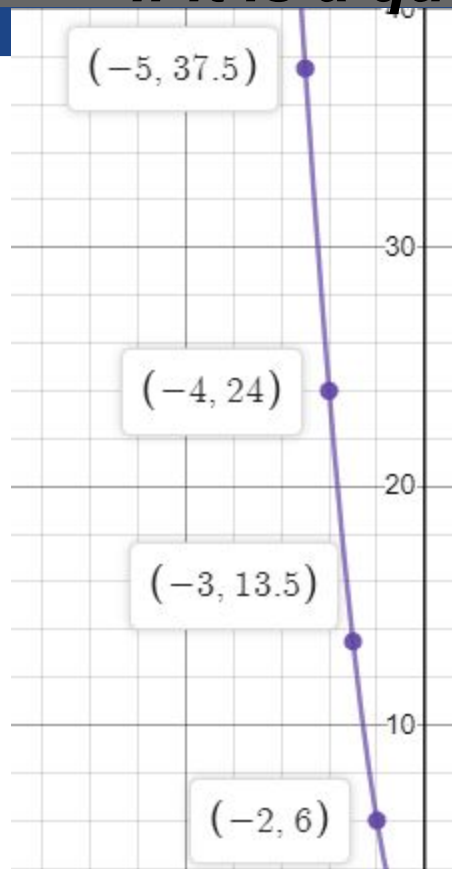


**B)**

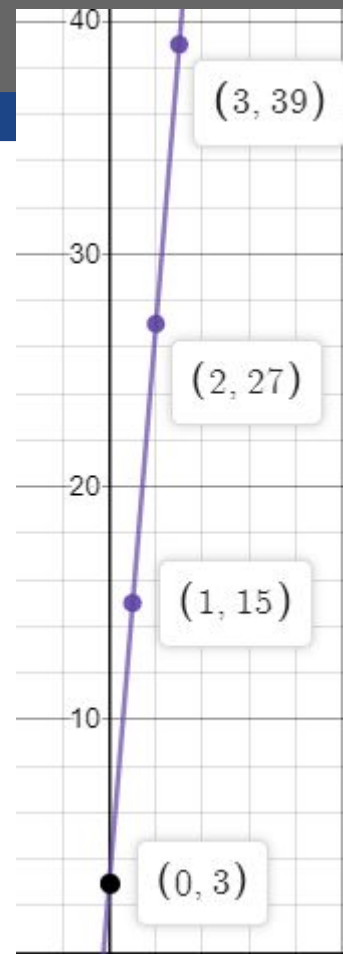


Use the graphs below to determine if it is a quadratic function:

**C)**



**D)**





## More Practice

See what you know!

Is a table linear, exponential or quadratic?

Complete the table of a quadratic function

**\*\*This practice includes worked-out examples, hints and allows you to check your answer!**