Does this data appear to come from a linear or quadratic function?

X	Y	1st difference	1st difference
1	2		
		3	
2	5		2
		5	
3	10		2
		7	
4	17		

A constant 2nd difference indicates the data can be modeled with a quadratic

The actual equation is: $y = x^2 + 1$

Does this data appear to come from a linear or quadratic function?

X	Y	1st difference	1st difference
1	2		
		8	
3	10		8
		16	
5	26		8
		24	
7	50		

A constant 2nd difference indicates the data can be modeled with a quadratic

The actual equation is: $y = x^2 + 1$

Does this data appear to come from a linear or quadratic function?

	X	Y
	1	2
1		
	2	5
2		
	4	17
3		
	7	50

Because there isn't a constant difference in the x-values you can answer this question the same as the previous two questions. You would need other tools to be able to find the function that models this data.

It turns out that the actual equation is the same as the previous two.

$y = x^2 + 1$

Does this data appear to come from a linear or quadratic function?

	X	Y
	1	4
1		
	2	7
2		
	4	13
3		
	7	22
4		
	11	34

since there isn't a constant difference in x you can't simply use the differences in y alone to find out what function models this data.

But if you compare the changes in y to the corresponding changes in x:

$\frac{3}{1}$ $\frac{6}{2}$ $\frac{9}{3}$ $\frac{12}{4}$

you find out that there is a constant rate of change, therefore, the function is linear.

the actual equation is: $y = 3x + 1$

Sign on to Agilemind and take the assigned Quiz

This will be review for tomorrow's test

this must be finished by 10:00pm today.

This will count as a 20 point Classwork Assignment.