Patterns in Tables

April-25-19 8:34 AM

Math 8

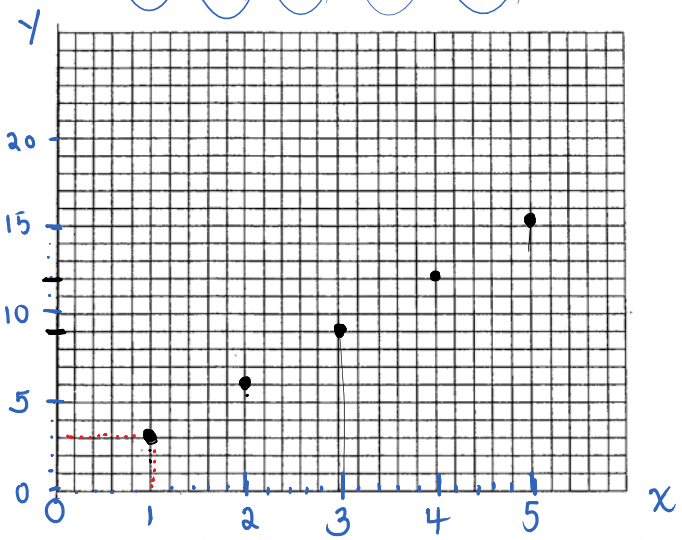
9.2 Patterns in a Table of Values

Recall – a linear relation is when the points on a graph form a perfectly straight line.

Example:

A – Draw a graph representing the ordered pairs. Label the points.

X	1	2	3	4	5
Y	3	6	9	12	15



① Label axes (x, y) or descriptions

② Label scale (use friendly numbers ex. 2, 5, 10, 25)

③ Plot points •

✱ use at least half the grid.

B – What is the difference between consecutive X-values? +1 (one after another)

C – What is the difference between consecutive Y-values? +3

D – Describe the relationship between X and Y. y is 3 times x (words)

E – What is an expression for Y in terms of X? y = 3x (↳ Equation)

When we have the graph of a linear relation, we can see if it forms a perfectly straight line. If we have a table of values for a linear relation, then we can see the consecutive x-values change by the same amount, and the consecutive y-values changes by the same amount.

Ex. Explain if the table of values represents a linear relation.

X	Y
0	5
2	8
4	11
6	14

+2, +2, +2 / +3, +3, +3

+2 ✓ +3 ✓

Yes linear relation

x and y values have constant change.

X	Y
4	12
5	15
6	17
7	21

+1, +1, +1 / +3, +2, +4

+1 ✓ ☹

No not linear relation

y-values do not have a constant change.