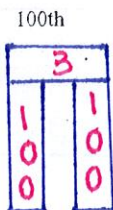
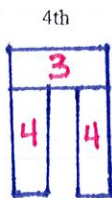
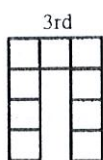
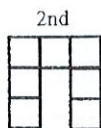
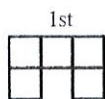


# Patterns and Rate of Change

## Big Ideas:

- Patterns are predictable.
- Rate of Change is how much a pattern increases each step of a sequence (How much is repeatedly added).
- Rate of Change can be determined from a pattern, table, graph and equation.

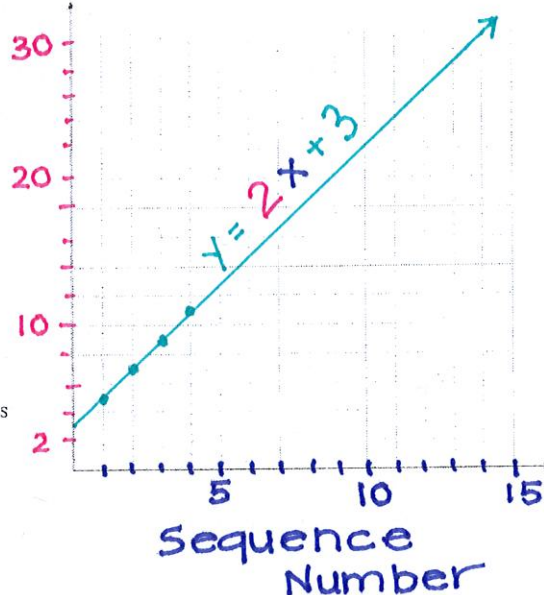


x	y
1	5
2	7
3	9
4	11

x = sequence number

y = total amount of squares

Total Squares



Equation:  $y = 2x + 3$

What is the rate of change (what is repeatedly added)?

2

How can you determine the rate of change from the table?

graph?  $y$  increases by 2 when  $x$  increases by 1

equation? coefficient (# next to  $x$ )

$y$  increases by 2 when  $x$  increases by 1