Section 1.5: Patterns and Relationships in Tables

- We can make a table of values for a relation such as 3n + 4 is related to n.

We then choose values for n (input numbers) and substitute these into the expression to get the output numbers.

If n = 1 then (3)(1) + 4 = 3 + 4 = 7

If n = 2 then (3)(2) + 4 = 6 + 4 = 10

Input n	Output 3n + 4
1	7
2	10
3	13
4	16

- You may also determine a relation given its table of values.

Input	Output
1	7
2	9
3	11
4	13
5	15

Let n represent any input number.

When n is increased by 1, the output number increases by 2.

This means the expression for the output numbers contains 2n.

The multiples of 2: 2, 4, 6, 8, 10. …

These multiples are ALL 5 less than those in the table.

So, the output is 2n + 5.

Therefore this table shows how 2n + 5 relates to n.