## Grade 7 Math

Unit 1 Notes: Patterns \& Relations

## Section 1.6: Graphing Relations

You can use a graph to show a relation.
This table and graph show how $4 \mathrm{n}-1$ relates to n .

| Input | Output |
| :---: | :---: |
| $\mathbf{n}$ | $\mathbf{4 n - 1}$ |
| 1 | 3 |
| 2 | 7 |
| 3 | 11 |
| 4 | 15 |



The scale on the output axis is 1 square to 2 units.
The points lie on a straight line, so this represents a linear relation.
Both the table and graph show that when the input number increases by 1 the output number increases by 4 .

