CHAPTER 5 Modelling With Graphs
5.6 Connecting Variation, Slope, and First Differences

The Rule of Four

## Example:

Use the Rule of Four to represent this relation in three other ways.

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| :---: | :---: |
| -2 | -5 |
| 0 | -1 |
| 2 | 3 |
| 4 | 7 |

## Solution:

Use a graph:
The graph is shown.

Use words:
The relation is a straight line. It passes through the vertical axis at -1 . The slope of the line is 2 .

Use an equation:
The equation of the line is $y=2 x-1$.


## Practice:

Use the Rule of Four to represent this relation in three other ways.

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| :---: | :---: |
| -3 | 9 |
| -1 | 5 |
| 1 | 1 |
| 3 | -3 |

## Answers:

Use a graph:
The graph is shown.

Use words:
The relation is a straight line. It passes through the vertical axis at 3 . The slope of the line is -2 .

Use an equation:
The equation of the line is $y=-2 x+3$.


