



Challenge

Choose any square of four numbers from the grid. Add together the two numbers in the opposite corners.

| | |
|---|---|
| 1 | 2 |
| 7 | 8 |

$1 + 8 =$

$2 + 7 =$

What do you notice?

| | | | | | |
|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 |

Think about ...



Try different squares of four numbers from the grid.



Make sure that you try enough 2 by 2 squares to be able to describe what you notice.

What if?

What do you notice when you find the difference between the two numbers in the opposite corners?

What do you notice when you add or subtract the two numbers in the opposite corners on these number grids?

| | | | | |
|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 |

| | | | |
|----|----|----|----|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |

What about a 1–100 number grid?

When you've finished, turn to page 80.

