

## Year 6 Investigations – Order of Operations

1. Make the numbers from 1 – 30 using the digits 1, 2, 3 and 4 and the symbols +, −, × and ÷. All four digits must be used in each equation.

Ideas for concrete resources to provide:

- Digit cards
- Scrap paper or whiteboards and pens for calculations
- Table to record findings for each number (tables to 20 and 30 are included)

Question prompts:

- What is the correct order of operations?
- What happens when you multiply or divide a number by 1?

Answers:

Answers for all numbers have been provided in this pack. Please note that the number 29 may require the use of indices (see example answers).

## Investigation 1

Make the numbers from 1 – 30 using the digits 1, 2, 3 and 4 and the symbols

+, −, × and ÷.

All four digits must be used in each equation, and each equation must follow the correct order of operations.

For example:  $(2 + 3) \times 4 \times 1 = 20$

## Investigation 6 – Order of Operations

| Number to make | Calculation |
|----------------|-------------|
| 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             |             |

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