Working with algebra: properties & rules

Complete the table with your teacher, or have a go yourself.

|  |  |  |
| --- | --- | --- |
| Rule/property | Number examples | Algebra examples |
| Multiplying by 0 always equals 0. |  |  |
| Adding or subtracting 0 does not change the value. |  |  |
| Multiplying or dividing by 1 does not change the value. |  |  |
| The order of addition does not matter. |  |  |
| Expressions can be rearranged to make calculation easier. |  |  |
| Multiplication is repeated addition. |  |  |
| The order of multiplication does not matter. |  |  |
| Division can be represented as a fraction, and vice versa. |  |  |
| Repeated operations with the same number can be grouped. |  |  |
| Multiplying a value by itself gives the square value. |  |  |
| Dividing a value by itself gives 1. |  |  |

Teacher copy

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| --- | --- | --- |
| Rule/property | Number examples | Algebra examples |
| Multiplying by 0 always equals 0. |  |  |
| Adding or subtracting 0 does not change the value. |  |  |
| Multiplying or dividing by 1 does not change the value. |  |  |
| The order of addition does not matter. | Therefore, |  |
| Expressions can be rearranged to make calculation easier. | –2 + 9 can be rearranged to 9 – 2  The sign ‘–’ belongs to the 2 |  |
| Multiplication is repeated addition. |  |  |
| The order of multiplication does not matter. | and  Therefore, | Which is shortened to: |
| Division can be represented as a fraction, and vice versa. |  |  |
| Repeated operations with the same number can be grouped. |  |  |
| Multiplying a value by itself gives the square value. |  |  |
| Dividing a value by itself gives 1. |  |  |

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