

Year 6 Number Knowledge – Summer 1

Each week, we would like you to choose at least one of the following activities to complete at home to help you with your understanding of number.

Each of these activities have been chosen as they are the areas children most commonly make mistakes with.



Play on TTRockstars.
<https://trockstars.com/>

If you are having problems logging in, please speak to us and we can help.

Multiply and divide by 10, 100 and 1000.

Calculate the following using a place value grid if needed:

| | |
|----------------------|---------------------|
| $3.96 \times 10 =$ | $53.3 \div 100 =$ |
| $62.1 \times 100 =$ | $458.23 \div 100 =$ |
| $38.7 \times 1000 =$ | $37.2 \div 10 =$ |
| $7.03 \times 100 =$ | $617.2 \div 100 =$ |
| $0.02 \times 10 =$ | $600.2 \div 1000 =$ |

Common subtraction where there is a 0

$49 - 2.47 = 46.53$

| H | T | O | . | $\frac{1}{10}$ | $\frac{1}{100}$ |
|---|---|---|---|----------------|-----------------|
| | 4 | 9 | . | 1 | 0 |
| - | | 2 | . | 4 | 7 |
| | 4 | 6 | . | 5 | 3 |

Now try these:

| | |
|-----------------|-----------------|
| $3 - 1.58 =$ | $19 - 3.58 =$ |
| $25 - 16.34 =$ | $47 - 21.102 =$ |
| $38 - 21.218 =$ | $64 - 27.528 =$ |

Percentage of amounts

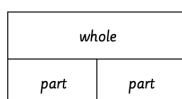
| | |
|--------------------------|---------------|
| $36\% \text{ of } 240 =$ | |
| Step 1 | |
| $100\% = 240$ | $100\% = 240$ |
| $50\% = 120$ | $10\% = 24$ |
| $5\% = 12$ | $1\% = 2.4$ |
| Step 2 | |
| $10\% = 24$ | |
| $10\% = 24$ | |
| $10\% = 24$ | |
| $5\% = 12$ | |
| $1\% = 2.4$ | |
| $36\% = 86.4$ | |

Calculate the following:

- $16\% \text{ of } 250 =$
- $85\% \text{ of } 240 =$
- $76\% \text{ of } 450 =$
- $4\% \times 160 =$
- $15\% \times 920 =$
- $11\% \text{ of } 90 =$
- $45\% \text{ of } 20 =$
- $57\% \text{ of } 810 =$

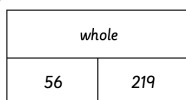
Missing number calculations: understanding the inverse.

Remember this model



$\text{part} + \text{part} = \text{whole}$
 $\text{whole} - \text{part} = \text{part}$

Example:



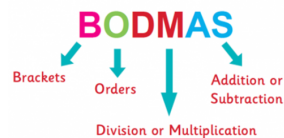
$\underline{\quad} - 56 = 219$
 $\text{whole} - \text{part} = \text{part}$
 The whole is missing.

Because **part + part = whole**, I need to do $56 + 219$ to calculate the missing number which is **275**.

| | |
|-----------------------------------|-----------------------------------|
| $\underline{\quad} + 482 = 1384$ | $348 - \underline{\quad} = 184$ |
| $8204 - \underline{\quad} = 2194$ | $1784 + \underline{\quad} = 9482$ |

Order of operations

This is the order you calculate in:



Example: $3^2 + (9 \times 2) =$

Step 1: Brackets – I do $9 \times 2 = 18$ first.

Step 2: Orders – I do $3^2 = 9$ second.

Step 3: Addition or Subtraction – I do $+ \text{ last}$
 $9 + 18 = 27$

| | |
|------------------------|----------------------|
| $(3 + 5) \times 4^2 =$ | $7 + 5^2 \times 2 =$ |
| $4 + 5 \times 8 =$ | $45 - 3 \times 6 =$ |