



Spring Term - Y6 Maths - Decimals

Previously learned vocabulary
Decimal (y4)
Hundredth (y4)
Thousandth (y5)
Decimal places (y4)
New vocabulary (learned in y6)
Multi-step
Long division
Interval

Compare and order decimals

T	H	H	T	O.	t	h	th
			3	2	6	7	
			3	2	7	6	

Use of place value knowledge to compare and order decimal numbers

Round any number to a required degree of accuracy

Round 432.674 to 2 dp

7 is the place, next door is 4
It is less than 5 so 7 stays as it is and we eliminate the 4!
The answer would be 432.67

Addition and subtraction with decimals

$$187.65 + 25.3 =$$

We set out the addition like this using place value knowledge to help. Make sure the decimal points are lined up!

	1	8	7	.	6	5	
+	0	2	5	.	3	0	
				.			

Top Tip! Add in place holders to empty spaces

Find the place
Look next door
5 or more, raise the score
4 or less, let it rest
Look to the right...
Eliminate the digits!

Multiplying and dividing decimals by integers

	3	.	4	5	
x				3	
	1	0	.	3	5
	1		1		

8.12 ÷ 4			
2	.	0	3
4	8	.	1 2

Multiplying and dividing decimals by 10, 100 and 1000

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			2	.	0	8
		← × 10	2	.	0	8
			2	.	0	8
			2	.	0	8
			2	.	0	8
			2	.	0	8

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			4	.	3	5
		← × 100	4	.	3	5
4			3	.	5	
			4	.	3	5
			4	.	3	5
			4	.	3	5

To multiply a number by 10, 100 or 1,000, move the digits 1, 2 or 3 places to the left. Use placeholders (0) to fill empty columns.

$$2.3 \times 100 = 230$$

$$2.3 \rightarrow 23.0 \text{ (one place to the left)}$$

$$2.3 \rightarrow 230.0 \text{ (two places to the left)}$$

Tip: the decimal point must not move.

To divide a number by 10, 100 or 1,000, move the digits 1, 2 or 3 places to the right. Use placeholders (0) to fill empty columns.

$$14 \div 1,000 = 0.014$$

$$14.0 \text{ (write the whole number with a decimal point and placeholder)}$$

$$1.4 \text{ (one place to the right)}$$

$$0.14 \text{ (two places to the right)}$$

$$0.014 \text{ (three places to the right)}$$

Tip: the decimal point must not move.