



# Order and Compare Decimals

A **decimal number** is made up of a whole number, a decimal point and any decimals (such as tenths, hundredths and thousandths).



To **order and compare** decimal numbers, we look at the **place value** of each of the digits, working left to right.

For example, **2.315** is made up of 2 ones, 3 tenths, 1 hundredth and 5 thousandths...

Ones	.	Tenths	Hundredths	Thousandths
1 1	.	0.1 0.1 0.1	0.01	0.001 0.001 0.001 0.001 0.001
2	.	3	1	5

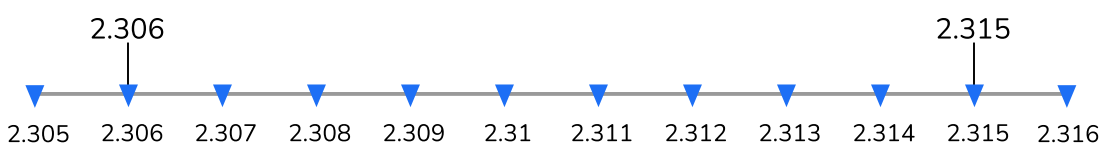
...and **2.306** is made up of 2 ones, 3 tenths, 0 hundredths and 6 thousandths.

Ones	.	Tenths	Hundredths	Thousandths
1 1	.	0.1 0.1 0.1		0.001 0.001 0.001 0.001 0.001 0.001
2	.	3	0	6

If we compare 2.315 and 2.306, we see that **2.315** and **2.306** both have **2 ones** and **3 tenths**. This doesn't help us see which number is bigger!

We need to compare the **hundredths** columns. 2.315 has 1 hundredth and 2.306 has 0 hundredths. This means that 2.306 is **less than** 2.315.

$$2.306 < 2.315$$



## Example Question

Ato is deciding which of these three ice creams to buy.



£4.75



£4.05



£4.49

Which is the cheapest of these three ice creams?

**1** Compare the value of the **leftmost digit**.

All of the ice creams have **4 ones**. We need to look at the **tenths** column!

**2** Continue comparing the digit(s) in the **next place value column to the right** until one is smaller than the rest.

£4.05 has **0 tenths**, £4.49 has **4 tenths**, £4.75 has **7 tenths**.

**3** We can now order the ice creams from least to most expensive!



**£4.05** is the cheapest ice cream!