



Fractions that can't be simplified

Take a look at these fractions: $\frac{3}{4}$, $\frac{4}{5}$, $\frac{7}{8}$, $\frac{9}{11}$.

What do you notice about them? Can they be simplified?

There is **no** number that can go into both the **top number** and the **bottom number** exactly, so these fractions **can't** be simplified.

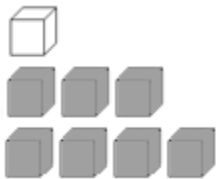
They're already in their simplest form.



$\frac{3}{4}$ of this shape is shaded.



$\frac{4}{5}$ of this shape is shaded.



$\frac{7}{8}$ of these shapes are shaded.



$\frac{9}{11}$ of these shapes are shaded.

Have a look at these fractions: $\frac{5}{6}$, $\frac{6}{7}$, $\frac{7}{9}$, $\frac{10}{11}$. Can you simplify any of them?

None of them can be simplified because in each fraction there is no number that will go into both the top number and the bottom number without leaving a remainder.

Let's look at $\frac{5}{6}$.

The numbers less than 5 (the top number) but greater than 1 are **2**, **3** and **4**.

2 goes into 6 exactly three times, but doesn't go exactly into 5, as $5 \div 2$ has a remainder of 1.

3 goes into 6 exactly twice, but doesn't go exactly into 5, as $5 \div 3$ has a remainder of 2.

$5 \div 4$ leaves a remainder and $6 \div 4$ also leaves a remainder, so 4 leaves a remainder in both 5 and 6.

We can't use any of 2, 3 or 4 to simplify the fraction. So it's impossible to simplify $\frac{5}{6}$.