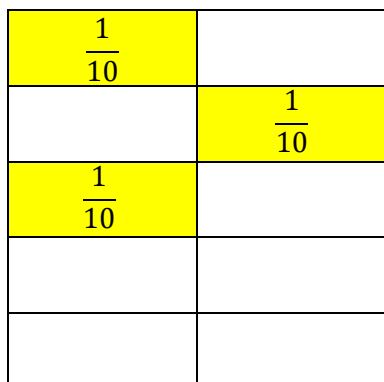


As we now know, decimal numbers are a way of showing fractions of a whole, (as are the fractions that we learned about a few weeks ago in school). Here's a square divided into 10 equal parts (tenths);



Three tenths have been shaded in.

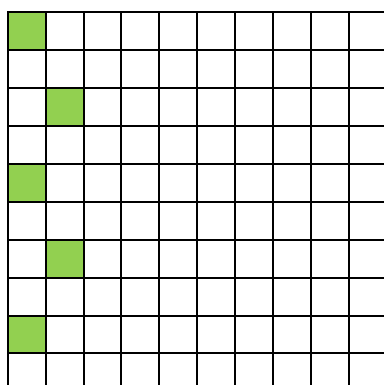
$$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} = \frac{3}{10}$$

Because the denominators are the same, we can simply count, 1, 2, 3.

ones   dp   tenths   So,  $\frac{3}{10}$  is the same as 0.3.

0   •   3

Here's another square, divided into 100 equal parts (hundredths)



Five hundredths have been shaded in.

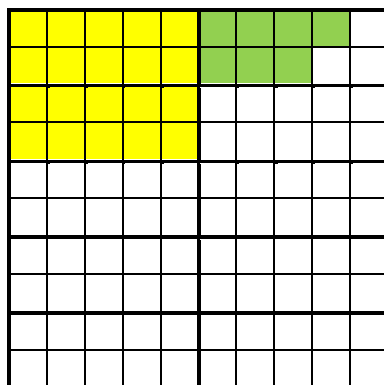
$$\frac{1}{100} + \frac{1}{100} + \frac{1}{100} + \frac{1}{100} + \frac{1}{100} = \frac{5}{100}$$

Because the denominators are the same, we can simply count, 1, 2, 3, 4, 5.

ones   dp   tenths   hundredths   So,  $\frac{5}{100}$  is the same as 0.05.

0   •   0   5

The square split into tenths can be overlayed onto the square split into hundredths. We can see that there are 10 hundredths inside each tenth, so 1 tenth = 10 hundredths;



We can simply count the tenths (the 2 yellow rectangles) and the hundredths (the 7 green squares) and write these into a place value grid;

ones   dp   tenths   hundredths   = 0.27

0   •   2   7

The two yellow tenths are the same as 20 green hundredths.