

Wednesday 29th April

L.K: Ordering fractions using doubling and halving

Today, we will be ordering fractions that have different denominators using doubling and halving.

Example,

$$\frac{1}{2} \text{ OR } \frac{1}{4}$$

We need to look at the denominators and we see that the denominators are different. So that we can compare the fractions, they need to be the same. So we double the 2 to make it into a four. We also need to double the top, as whatever we do to the denominator, we need to do the numerator!

$$\frac{2}{4} \text{ OR } \frac{1}{4}$$

So $\frac{1}{2}$ has changed into $\frac{2}{4}$, which is bigger than $\frac{1}{4}$. Therefore, we can conclude that a half is bigger than a quarter!

Try these questions and tell me which fraction is bigger. Make sure to change the denominators if you need to. If you need to change them and don't, then you won't be able to compare fractions properly!

- 1) $\frac{2}{3}$ OR $\frac{3}{6}$
- 2) $\frac{4}{5}$ OR $\frac{1}{10}$
- 3) $\frac{5}{11}$ OR $\frac{12}{22}$
- 4) $\frac{3}{5}$ OR $\frac{6}{10}$
- 5) $\frac{4}{8}$ OR $\frac{1}{2}$
- 6) $\frac{8}{9}$ OR $\frac{4}{18}$
- 7) $\frac{7}{14}$ OR $\frac{19}{28}$
- 8) $\frac{5}{9}$ OR $\frac{9}{18}$
- 9) $\frac{12}{10}$ OR $\frac{23}{20}$

Reasoning and Problem Solving

One Star

- 1) I have a Mars Bar. I eat half of my Mars Bar and my friend eats three quarters. Who eats more of their Mars Bar?
- 2) " $\frac{1}{3}$ is bigger than $\frac{3}{6}$ " Am I correct? Explain your answer.

Two Star

- 1) I break a vase and lose $\frac{4}{10}$ of the pieces. I manage to find $\frac{12}{40}$ of the pieces. Have I found all of the pieces and will I be able to glue the vase back together?
- 2) "I've nearly finished my Maths book and have $\frac{1}{8}$ of my book left to use! My friend has also nearly finished and he has $\frac{3}{16}$ of his book left. Who has the most largest amount of pages left?
- 3) "When you halve or double a fraction to find equivalence, you only need to change the denominators" Is this correct? Prove your answer with an example.

Three Star

- 1) I break a vase and lose $\frac{4}{10}$ of the pieces. I manage to find $\frac{12}{40}$ of the pieces. Have I found all of the pieces and will I be able to glue the vase back together? What fraction of the pieces do I still have to find?
- 2) "When you halve or double a fraction to find equivalence, you only need to change the denominators" Is this correct? Prove your answer with an example.
- 3) A) "Half of my daffodils in my garden have bloomed so far. My neighbour has also been growing flowers and nine fourteenths of his flowers have bloomed so far". Who has the most amount of daffodils so far?
b) "I manage to grow another three fourteenths of flowers before my neighbour has grown any more. Who has the most flowers now?"