

05.03.21

LO: I can compare and order fractions that are less than 1.

1 Write the fractions in ascending order.

a)  $\frac{2}{5}, \frac{2}{7}, \frac{2}{3}, \frac{2}{4}, \frac{2}{10}$

$\frac{2}{10}$   $\frac{2}{7}$   $\frac{2}{5}$   $\frac{2}{4}$   $\frac{2}{3}$

b)  $\frac{2}{3}, \frac{5}{9}, \frac{1}{9}, \frac{5}{6}, \frac{2}{9}$

$\frac{1}{9}$   $\frac{2}{9}$   $\frac{5}{9}$   $\frac{2}{3}$   $\frac{5}{6}$

c)  $\frac{3}{5}, \frac{7}{10}, \frac{1}{2}, \frac{3}{10}, \frac{1}{5}$

$\frac{1}{5}$   $\frac{3}{10}$   $\frac{1}{2}$   $\frac{3}{5}$   $\frac{7}{10}$

d)  $\frac{3}{8}, \frac{6}{17}, \frac{12}{30}, \frac{2}{7}, \frac{1}{3}$

$\frac{2}{7}$   $\frac{1}{3}$   $\frac{6}{17}$   $\frac{3}{8}$   $\frac{12}{30}$

2 Tommy and Eva are comparing fractions.

$\frac{2}{3}$   $\frac{8}{12}$   $\frac{4}{9}$



Tommy

I found a common denominator of 36 to compare the fractions.

I found a common numerator of 4 to compare the fractions.

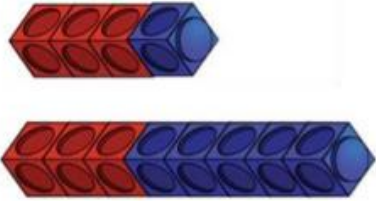


Eva

Whose method is more efficient? \_\_\_\_\_

I wonder whose method you picked! Could you explain why you thought that?

- 3 Ron makes  $\frac{3}{4}$  and  $\frac{3}{8}$  out of cubes.



He thinks that  $\frac{3}{8}$  is equal to  $\frac{3}{4}$

Do you agree? No

Explain your answer.

You could have said something like: I disagree with Ron because the two wholes are not equal. He could have compared using numerators or converted  $\frac{3}{4}$  to  $\frac{6}{8}$ , making it larger than  $\frac{3}{8}$ .

Or you might have explained it slightly differently. Perhaps you drew bars to help you explain.

- 4 What could the missing numerator be?

$$\frac{3}{5} < \frac{\boxed{\phantom{000}}}{15} < \frac{9}{10}$$

Write all four possibilities.

$$\frac{10}{15}$$

$$\frac{11}{15}$$

$$\frac{12}{15}$$

$$\frac{13}{15}$$

Did you work out that  $\frac{3}{5} = \frac{9}{15}$  and  $\frac{9}{10} = \frac{13.5}{15}$  (even though we wouldn't ever really say that!). If you managed to do that, then I'm sure you were able to identify all four possibilities.

- 5 Always, sometimes, never?

If one denominator is a multiple of the other you can simplify the fraction with the larger denominator to make the denominators the same.

Example:

Could  $\frac{?}{4}$  and  $\frac{?}{12}$  be simplified to  $\frac{?}{4}$  and  $\frac{?}{4}$ ?

Prove it. The answer is sometimes.

Here's an example to prove it:

It does not work for some fractions e.g.  $\frac{8}{15}$  and  $\frac{3}{5}$ .

But does work for others e.g.  $\frac{1}{4}$  and  $\frac{9}{12}$