

Fractions – comparing and ordering fractions

Comparing and ordering fractions with like numerators and denominators is a simple process: When the denominators are different, we need to change the fractions so they have the same denominator. This lets us compare like with like.

Which is larger? $\frac{3}{4}$ or $\frac{5}{8}$

To convert quarters to eighths we double the denominator and numerator, so $\frac{3}{4}$ becomes $\frac{6}{8}$. $\frac{6}{8}$ is larger than $\frac{5}{8}$, so $\frac{3}{4}$ is larger than $\frac{5}{8}$.

1 Order these fractions:

$1\frac{1}{2}$ $\frac{5}{4}$ $\frac{3}{4}$ $\frac{2}{4}$ $1\frac{3}{4}$ $\frac{1}{4}$ $\frac{4}{4}$



Hmm ... I had better make the mixed numbers into improper fractions as well. That will make them easier to compare.

THINK

2 Rename a fraction in each group so that you can compare them more easily. Circle the larger fraction:

a $\frac{1}{2}$ $\frac{2}{8}$

b $\frac{4}{8}$ $\frac{3}{4}$

c $\frac{2}{6}$ $\frac{1}{2}$

d $\frac{10}{12}$ $\frac{3}{4}$

3 Write or draw a fraction on the left that would result in the scale looking like this:



Remember with equivalent fractions, we think about what we did to get from one to the other:

$$\frac{2}{3} = \frac{8}{12}$$

$\times 4$
 $\times 4$



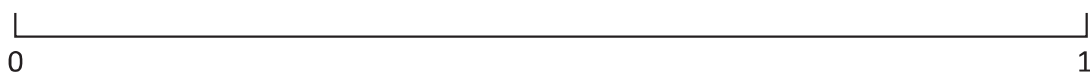
REMEMBER

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4 Find a partner to play this game with:

Name a fraction between 0 and 1 and place it on the number line. Your partner then has to name and place a fraction that fits between that fraction and 1. Then you have to find one that fits between their fraction and 1 and so on. The game continues until one player cannot think of a fraction, or can't fit one in.

You can challenge a fraction placement. If you are right, your partner has to remove their fraction. If you are wrong, they get to do the 'told you so' dance.



5 These fractions are all out of order. Cut them out and put them in order from smallest to largest. Place any equivalent fractions on top of each other. There is a space for you to rename the fractions on each of the cards if this will help. Share your thinking with a partner.

Have they ordered them the same way?

$\frac{1}{2}$ <input type="text"/> $\frac{\quad}{16}$	$\frac{6}{8}$ <input type="text"/> $\frac{\quad}{16}$	$\frac{1}{4}$ <input type="text"/> $\frac{\quad}{16}$	$\frac{12}{16}$ <input type="text"/> $\frac{\quad}{16}$	$\frac{13}{16}$ <input type="text"/> $\frac{\quad}{16}$	$\frac{15}{16}$ <input type="text"/> $\frac{\quad}{16}$
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