

Lowest Terms

Find the largest number that can divide into both the numerator and the denominator.

Eg $\frac{24}{36} = \frac{2}{3}$ *both ÷ 12*
 $\frac{24}{36} = \frac{12}{18} = \frac{4}{6} = \frac{2}{3}$


The largest number that can be divided into 24 and 36 is 12, so if both are divided by 12, the fraction in lowest terms is $\frac{2}{3}$

a) $\frac{10}{20} = \frac{2}{4} = \frac{1}{2}$ c) $\frac{8}{14} = \frac{4}{7}$

b) $\frac{6}{10} = \frac{3}{5}$ d) $\frac{9}{12} = \frac{3}{4}$

Equivalent Fractions

Find out what number was needed to multiply the numerator/denominator to find the other numerator/denominator, and then do the same.

Eg $\frac{3}{5} = \frac{6}{10}$ *x2*


To turn a 5 into a 10, you need to multiply it by 2. Therefore, you also need to multiply the numerator by 2. $3 \times 2 = 6$, so the

equivalent fraction is $\frac{6}{10}$

a) $\frac{2}{5} = \frac{12}{30}$ *x6* b) $\frac{3}{4} = \frac{9}{12}$ *x3*

** for comparing 2 fractions with different denominators*

Lowest Common Denominator

When you have 2 or more fractions, the lowest common denominator is the also the lowest common multiple of the two numbers. You can make equivalent fractions for each with the LCD as the new denominator.

$\frac{1}{4}, \frac{2}{3}$ 3: 3, 6, 9, **12**, 15, 18 4: 4, 8, **12**, 16, 20, 24

The lowest common denominator here is 12, because it's the smallest number that is in the times tables for 3 and 4.

a) $\frac{3}{4}, \frac{2}{5}$ LCD = 20 b) $\frac{3}{4}, \frac{5}{6}$ LCD = 12

*4, 8, 12, 16, **20**, 24* *4, 8, **12**, 16, 20, 24*
*5, 10, 15, **20**, 25* *6, **12**, 18, 24, 30, 36*

c) $\frac{5}{8}, \frac{1}{2}$ LCD = 8 d) $\frac{7}{9}, \frac{5}{6}$ LCD = 18

***8**, 16, 24, 32, 40*
*2, 4, 6, **8**, 10, 12, 14, 16, 18*

Adding/Subtracting Fractions

To add fractions, **you need to have a common denominator**. You can then add the numerators and the denominators stay the same.

If you don't have a common denominator, you will need to find the lowest common denominator and make equivalent fractions. You should try to convert your answer to lowest terms after you are finished

a) $\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$ b) $\frac{4 \times 2}{4 \times 3} + \frac{1 \times 3}{4 \times 3} = \frac{8}{12} + \frac{3}{12} = \frac{11}{12}$

c) $\frac{9}{10} - \frac{3}{10} = \frac{6}{10} = \frac{3}{5}$

- ① Find common denominator
- ② Make equivalent fractions
- ③ Add the fractions.