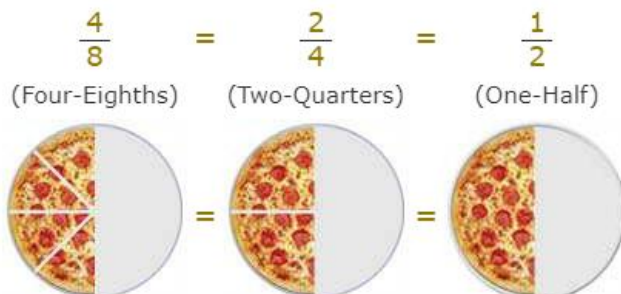


# Fractions and Decimals (Part 1)

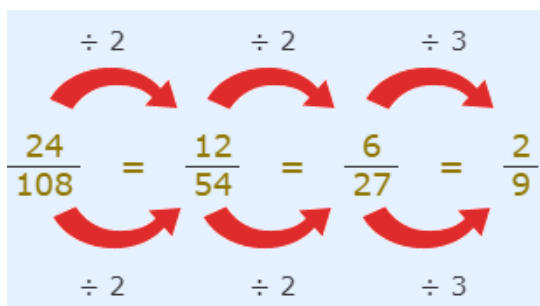
## A quick recap for fractions

Simplifying (or *reducing*) fractions means to make the fraction as simple as possible.

Why say four-eighths ( $\frac{4}{8}$ ) when we really mean half ( $\frac{1}{2}$ )?



To simplify a fraction, divide the top (numerator) and the bottom (denominator) by a common factor (a number that fits exactly into another number). Keep repeating this until you can't divide any further.

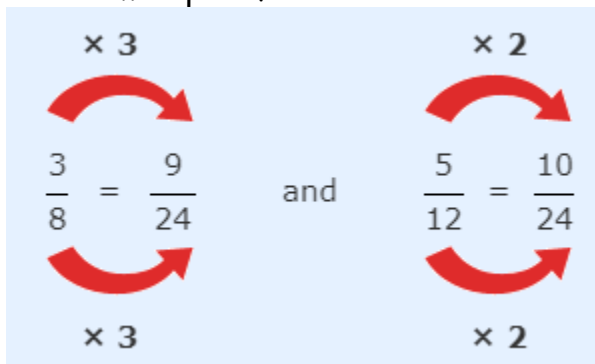


To compare and order fractions we need to change the denominators so that they are the same and then they are easy to compare. First, we need to find a common multiple of the current denominators. Then you need to convert the fractions, so they have the common multiple as their denominator. Remember what ever you do to the denominator, you must do to the numerator.

For example,

Which is larger:  $\frac{3}{8}$  or  $\frac{5}{12}$ ?

24 is a multiple of 8 and 12



Now, we can see that the second fraction is larger.

## Simplifying fractions

Using common factors, simplify the following fractions to their simplest form. You might need to do more than one division to reach the simplest form.

1.  $\frac{4}{16} = \underline{\quad}$

2.  $\frac{14}{21} = \underline{\quad}$

3.  $\frac{6}{15} = \underline{\quad}$

4.  $\frac{18}{34} = \underline{\quad}$

5.  $\frac{9}{12} = \underline{\quad}$

6.  $\frac{36}{45} = \underline{\quad}$

7.  $\frac{12}{20} = \underline{\quad}$

8.  $\frac{42}{64} = \underline{\quad}$

9.  $\frac{15}{24} = \underline{\quad}$

10.  $\frac{15}{35} = \underline{\quad}$

11.  $\frac{14}{16} = \underline{\quad}$

12.  $\frac{3}{33} = \underline{\quad}$

13.  $\frac{9}{18} = \underline{\quad}$

14.  $\frac{9}{27} = \underline{\quad}$

15.  $\frac{15}{25} = \underline{\quad}$

16.  $\frac{18}{54} = \underline{\quad}$

17.  $\frac{6}{8} = \underline{\quad}$

18.  $\frac{42}{49} = \underline{\quad}$

## Comparing and ordering fractions

**Activity 2** - Use the symbols  $<$   $>$  or  $=$  to compare these fractions. There is space underneath each question for you to write the fractions out with the same denominator.

1.  $\frac{1}{3}$    $\frac{1}{4}$

— —

2.  $\frac{1}{5}$    $\frac{3}{15}$

— —

3.  $\frac{3}{5}$    $\frac{7}{10}$

— —

4.  $\frac{2}{7}$    $\frac{3}{8}$

— —

5.  $\frac{1}{2}$    $\frac{4}{8}$

— —

6.  $\frac{5}{3}$    $\frac{27}{16}$

— —

7.  $\frac{25}{9}$    $\frac{11}{4}$

— —

8.  $\frac{5}{12}$    $\frac{2}{5}$

— —

9.  $\frac{11}{15}$    $\frac{3}{4}$

— —

10.  $\frac{30}{24}$    $\frac{5}{4}$

— —

