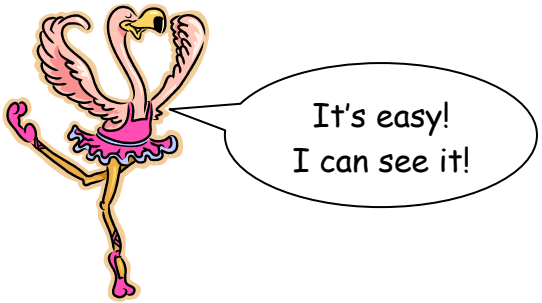
Equivalent fractions

There is a very simple rule for Equivalent Fractions:

What you do to the top you must do to the bottom.
What you do to the bottom you must do the top.

Here the top numbers have been multiplied by 2

$$\overset{\times 2}{\frac{1}{4}} = \underset{\times 2}{\frac{2}{8}}$$



I must do the same to the bottom

$\frac{1}{2} = \frac{5}{10}$ Here both sets of numbers have been x by 5

$\frac{3}{4} = \frac{6}{8}$ Here both sets of numbers have been x by 2

Got it?

Now complete the exercise on the following sheet.

You will need to concentrate!

Equivalent fractions

Look at this row of fractions:

$\frac{1}{2}$ =	$\frac{5}{10}$	$\frac{6}{12}$	$\frac{2}{4}$	$\frac{4}{8}$	$\frac{3}{6}$

It contains 5 fractions, in black, each of which is equal in value or **EQUIVALENT** to the fraction in red.

The rule is: **What you do to the top you must do to the bottom.** SIMPS!

Set your work out like this in your exercise books:

$$\frac{1}{2} \xrightarrow{\times 5} = \xrightarrow{\times 5} \frac{5}{10} \qquad \frac{1}{2} \xrightarrow{\times 6} = \xrightarrow{\times 6} \frac{6}{12}$$

and so on.

Now complete the five fractions in each row below so they are all equivalent to the fraction in red.
Take your time. Complete this exercise nice and slowly. Enjoy it!

$\frac{1}{2}$ =	$\frac{\_\_}{24}$	$\frac{\_\_}{8}$	$\frac{3}{\_\_}$	$\frac{\_\_}{16}$	$\frac{\_\_}{20}$
$\frac{1}{3}$ =	$\frac{6}{\_\_}$	$\frac{2}{\_\_}$	$\frac{3}{\_\_}$	$\frac{\_\_}{12}$	$\frac{\_\_}{15}$
$\frac{1}{5}$ =	$\frac{6}{\_\_}$	$\frac{\_\_}{10}$	$\frac{\_\_}{25}$	$\frac{\_\_}{20}$	$\frac{3}{\_\_}$
$\frac{2}{3}$ =	$\frac{12}{\_\_}$	$\frac{\_\_}{6}$	$\frac{10}{\_\_}$	$\frac{\_\_}{9}$	$\frac{8}{\_\_}$
$\frac{3}{4}$ =	$\frac{18}{\_\_}$	$\frac{6}{\_\_}$	$\frac{9}{\_\_}$	$\frac{\_\_}{16}$	$\frac{\_\_}{20}$
$\frac{1}{6}$ =	$\frac{6}{\_\_}$	$\frac{2}{\_\_}$	$\frac{5}{\_\_}$	$\frac{\_\_}{18}$	$\frac{\_\_}{24}$
$\frac{2}{5}$ =	$\frac{\_\_}{30}$	$\frac{4}{\_\_}$	$\frac{\_\_}{25}$	$\frac{6}{\_\_}$	$\frac{\_\_}{20}$
$\frac{5}{6}$ =	$\frac{\_\_}{36}$	$\frac{\_\_}{12}$	$\frac{25}{\_\_}$	$\frac{15}{\_\_}$	$\frac{20}{\_\_}$
$\frac{4}{5}$ =	$\frac{12}{\_\_}$	$\frac{\_\_}{10}$	$\frac{\_\_}{30}$	$\frac{20}{\_\_}$	$\frac{16}{\_\_}$
$\frac{3}{5}$ =	$\frac{18}{\_\_}$	$\frac{6}{\_\_}$	$\frac{\_\_}{25}$	$\frac{12}{\_\_}$	$\frac{15}{\_\_}$

$\frac{1}{8}$ =	$\frac{2}{\_\_}$	$\frac{\_\_}{48}$	$\frac{5}{\_\_}$	$\frac{4}{\_\_}$	$\frac{\_\_}{24}$
$\frac{1}{7}$ =	$\frac{\_\_}{42}$	$\frac{\_\_}{14}$	$\frac{5}{\_\_}$	$\frac{3}{\_\_}$	$\frac{\_\_}{28}$
$\frac{3}{8}$ =	$\frac{\_\_}{48}$	$\frac{6}{\_\_}$	$\frac{15}{\_\_}$	$\frac{\_\_}{24}$	$\frac{\_\_}{32}$
$\frac{1}{9}$ =	$\frac{6}{\_\_}$	$\frac{2}{\_\_}$	$\frac{3}{\_\_}$	$\frac{\_\_}{45}$	$\frac{\_\_}{36}$
$\frac{5}{8}$ =	$\frac{30}{\_\_}$	$\frac{10}{\_\_}$	$\frac{\_\_}{40}$	$\frac{15}{\_\_}$	$\frac{\_\_}{32}$
$\frac{4}{9}$ =	$\frac{24}{\_\_}$	$\frac{\_\_}{18}$	$\frac{20}{\_\_}$	$\frac{\_\_}{27}$	$\frac{16}{\_\_}$
$\frac{7}{8}$ =	$\frac{\_\_}{48}$	$\frac{\_\_}{16}$	$\frac{35}{\_\_}$	$\frac{\_\_}{24}$	$\frac{28}{\_\_}$
$\frac{3}{10}$ =	$\frac{18}{\_\_}$	$\frac{\_\_}{20}$	$\frac{\_\_}{50}$	$\frac{9}{\_\_}$	$\frac{12}{\_\_}$
$\frac{8}{9}$ =	$\frac{48}{\_\_}$	$\frac{16}{\_\_}$	$\frac{\_\_}{45}$	$\frac{\_\_}{27}$	$\frac{\_\_}{36}$
$\frac{7}{10}$ =	$\frac{42}{\_\_}$	$\frac{\_\_}{20}$	$\frac{\_\_}{50}$	$\frac{\_\_}{30}$	$\frac{28}{\_\_}$