Class 11 Maths

Mental Arithmetic:

In order to help you with all of your maths learning, it is important that you are practising your times tables regularly. If you have good times tables knowledge, you will find the questions below much easier as you need to be able to multiply and divide to find the equivalent fractions.

Remember to go on to Times Tables Rockstars regularly:

https://play.ttrockstars.com/auth

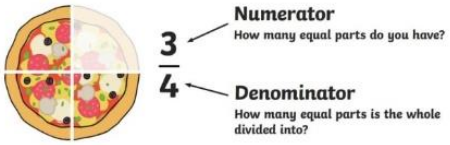
Your login is the same as the one you use in school.

Numberbots also uses the same login as TTRockstars. See the link below:

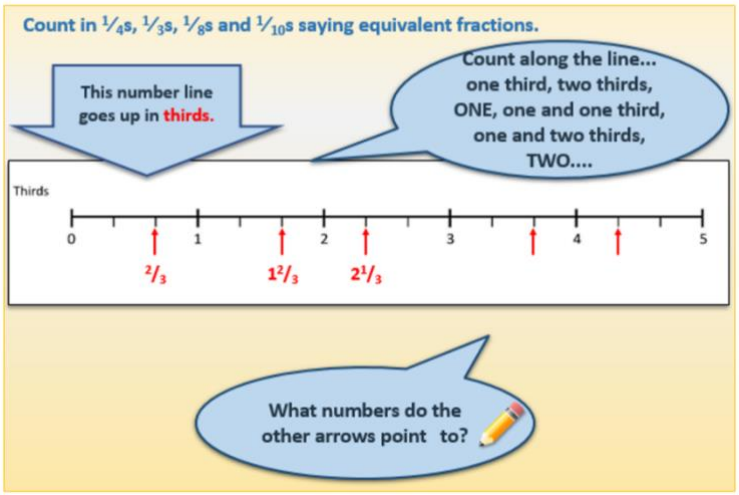
https://play.numbots.com/#/account/search-school

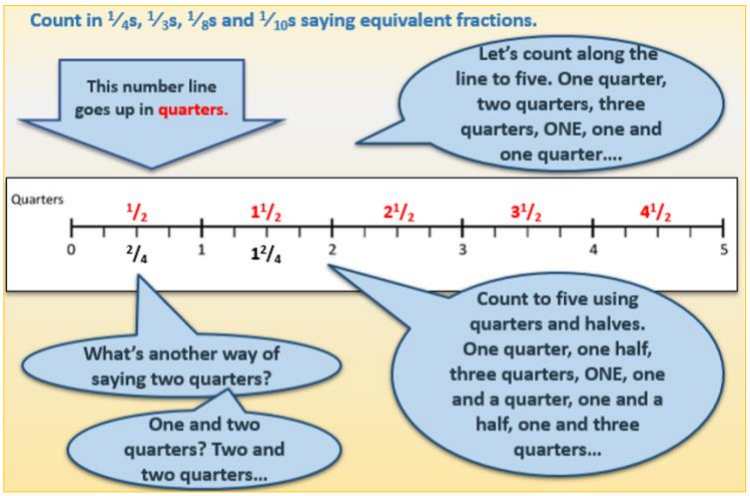
Counting

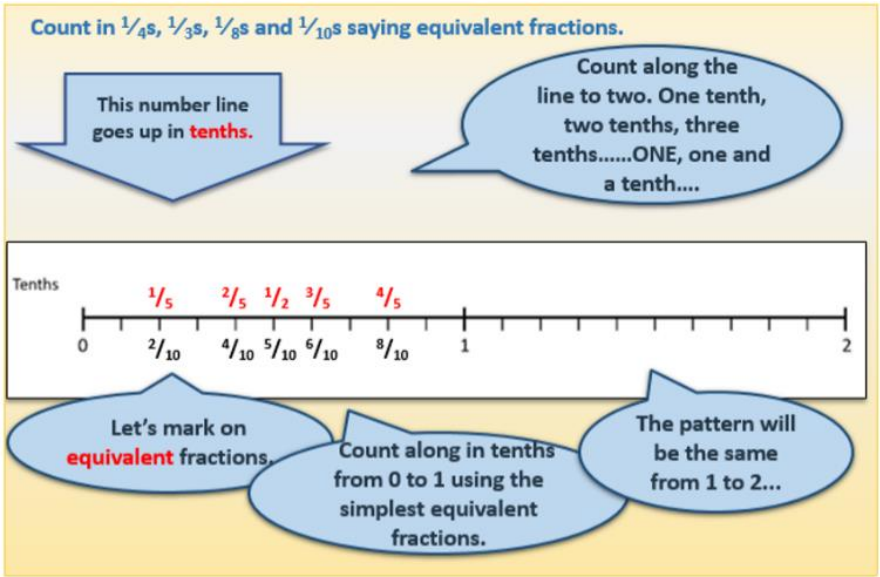
Remind yourself about fractions by using the number line like we did in school to help you to count in fractions. Remember that a fraction is a part of a whole. The denominator (bottom number) tells us how many parts are in the whole and the numerator (top number) tells us how many parts we have.



Have a go at counting in fractions using the following number lines.



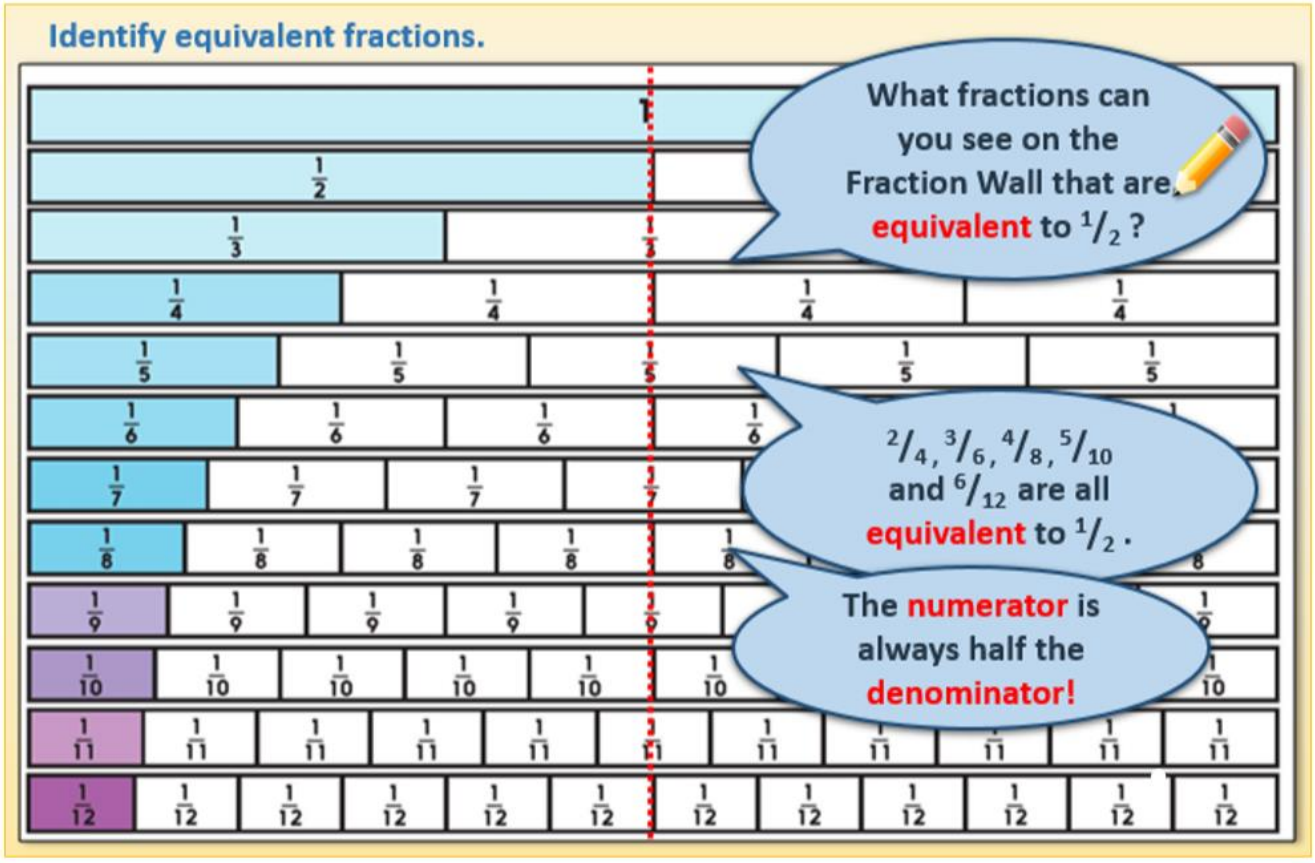


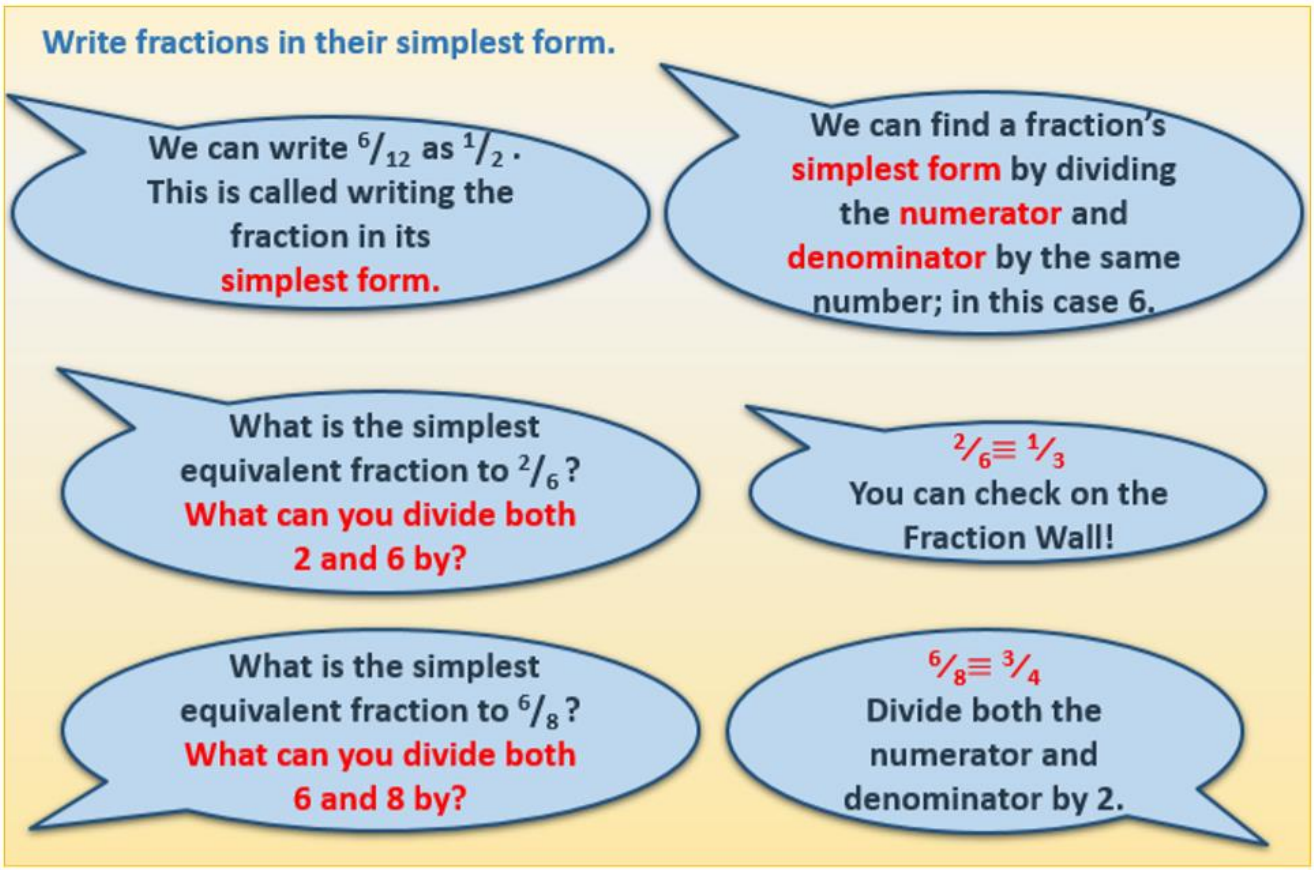


Equivalent Fractions

This week we are going to be looking at equivalent fractions. These are fractions with a different numerator and denominator, but which represent the same value or same amount of the whole. The fraction wall shown should help you to identify the equivalent fractions. Here are some learning reminders to help you.

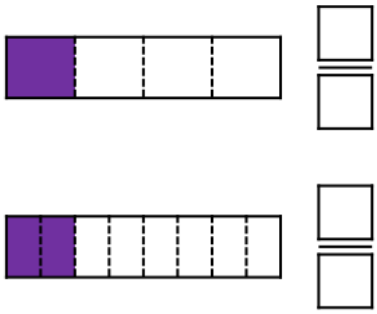
Learning reminders



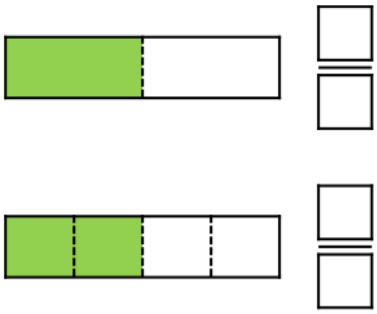


Have a go at the following questions. You can use the fraction wall above to help you if you need it.

1a. Write the fraction shaded in the images below.

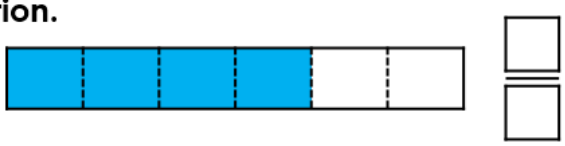


1b. Write the fraction shaded in the images below.

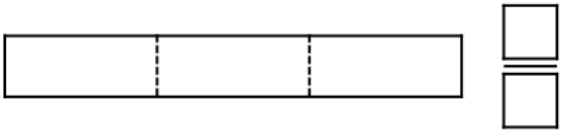


2a. Write the fraction shown in image A. Use image B to find the equivalent fraction.

A.

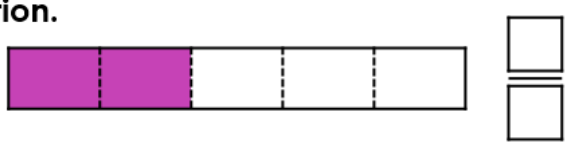


B.

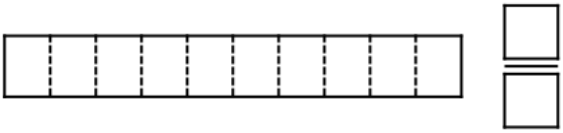


2b. Write the fraction shown in image A. Use image B to find the equivalent fraction.

A.



B.

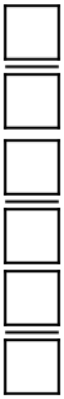


3a. Which two fractions are equivalent to each other?

A.

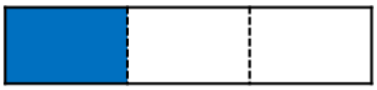
B.

C.



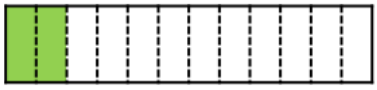
3b. Which two fractions are equivalent to each other?

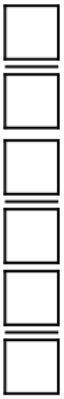
A.



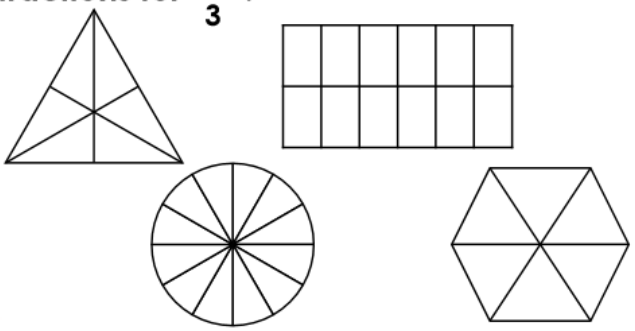
B.

C.

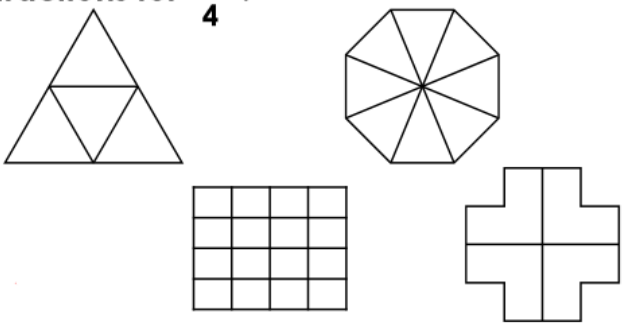




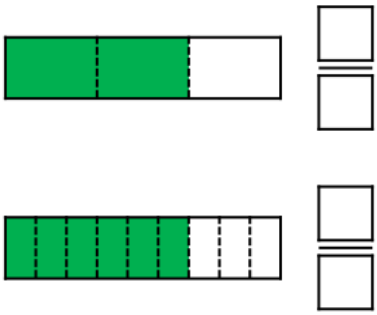
4a. Shade the shapes to find equivalent fractions for $\frac{1}{3}$.



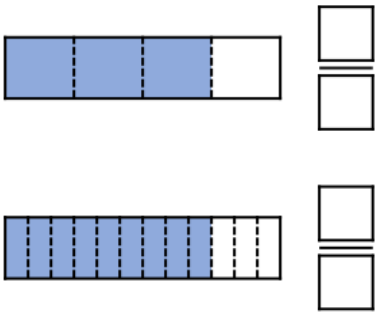
4b. Shade the shapes to find equivalent fractions for $\frac{1}{4}$.



5a. Write the fraction shaded in the images below.

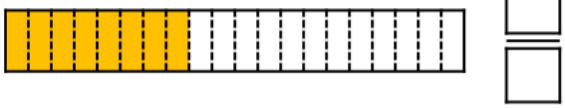


5b. Write the fraction shaded in the images below.

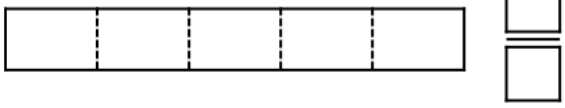


6a. Write the fraction shown in image A. Use image B to find the equivalent fraction.

A.

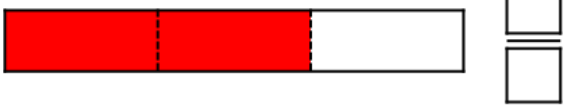


B.

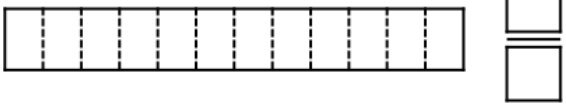


6b. Write the fraction shown in image A. Use image B to find the equivalent fraction.

A.

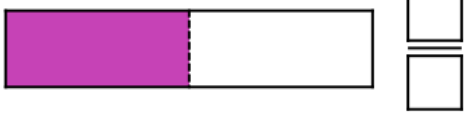


B.

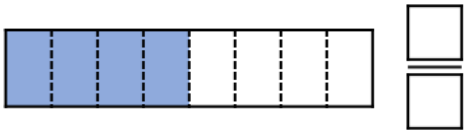


7a. Which two fractions are equivalent to each other?

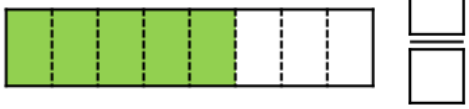
A.

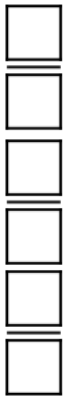


B.



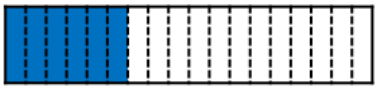
C.



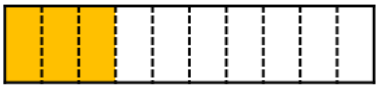


7b. Which two fractions are equivalent to each other?

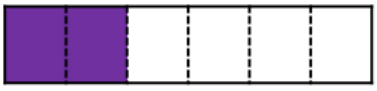
A.

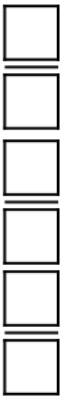


B.

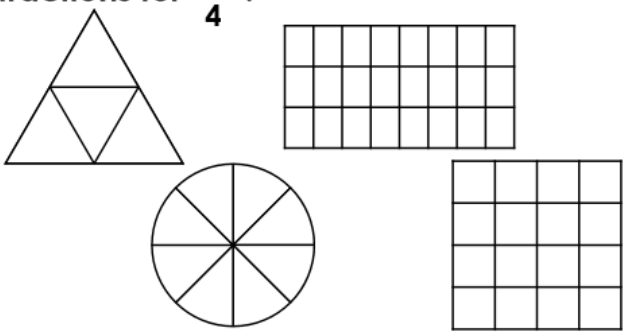


C.

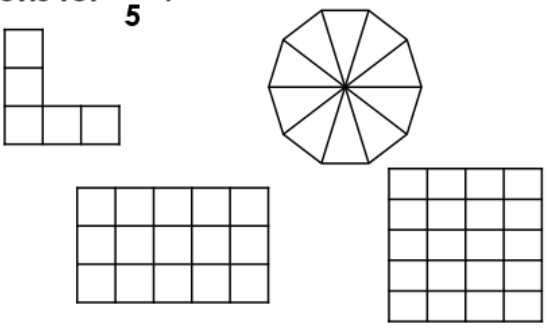




8a. Shade the shapes to find equivalent fractions for $\frac{3}{4}$.

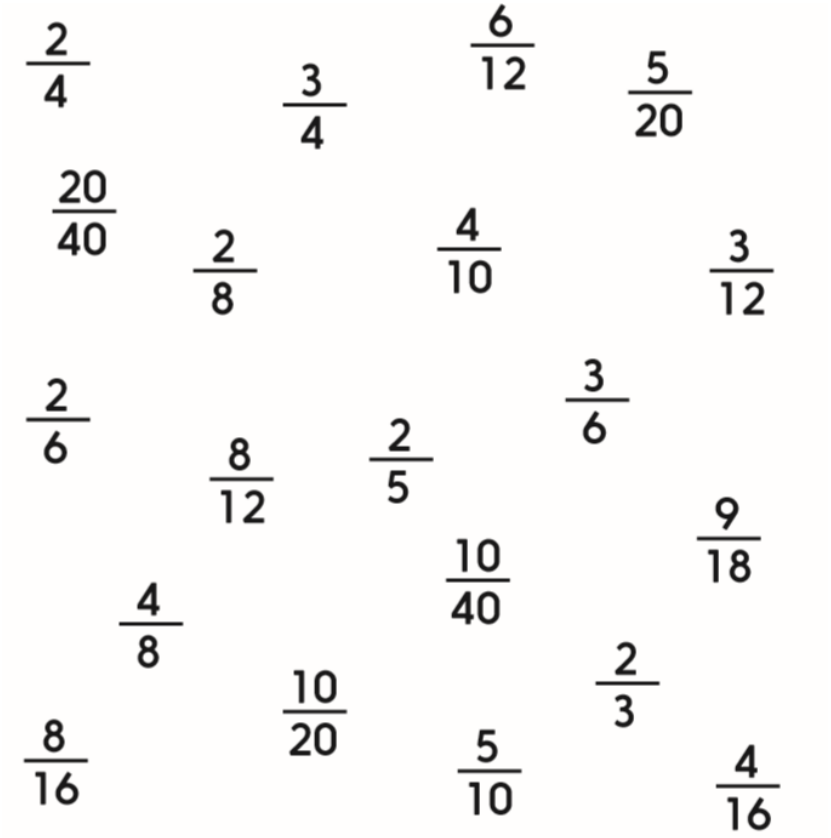


8b. Shade the shapes to find equivalent fractions for $\frac{3}{5}$.



<u>Activity 1:</u> Can you list all of the fractions below that are equivalent to 1/2?

Can you then produce another list of all of the fractions below which are equivalent to 1/4?

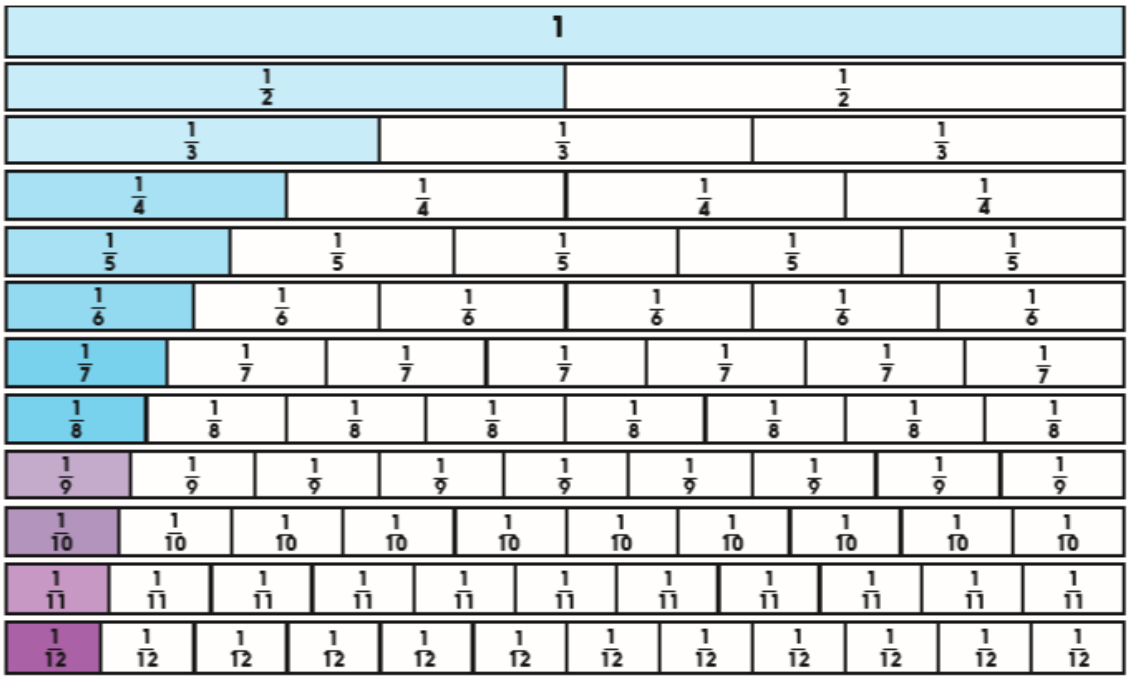


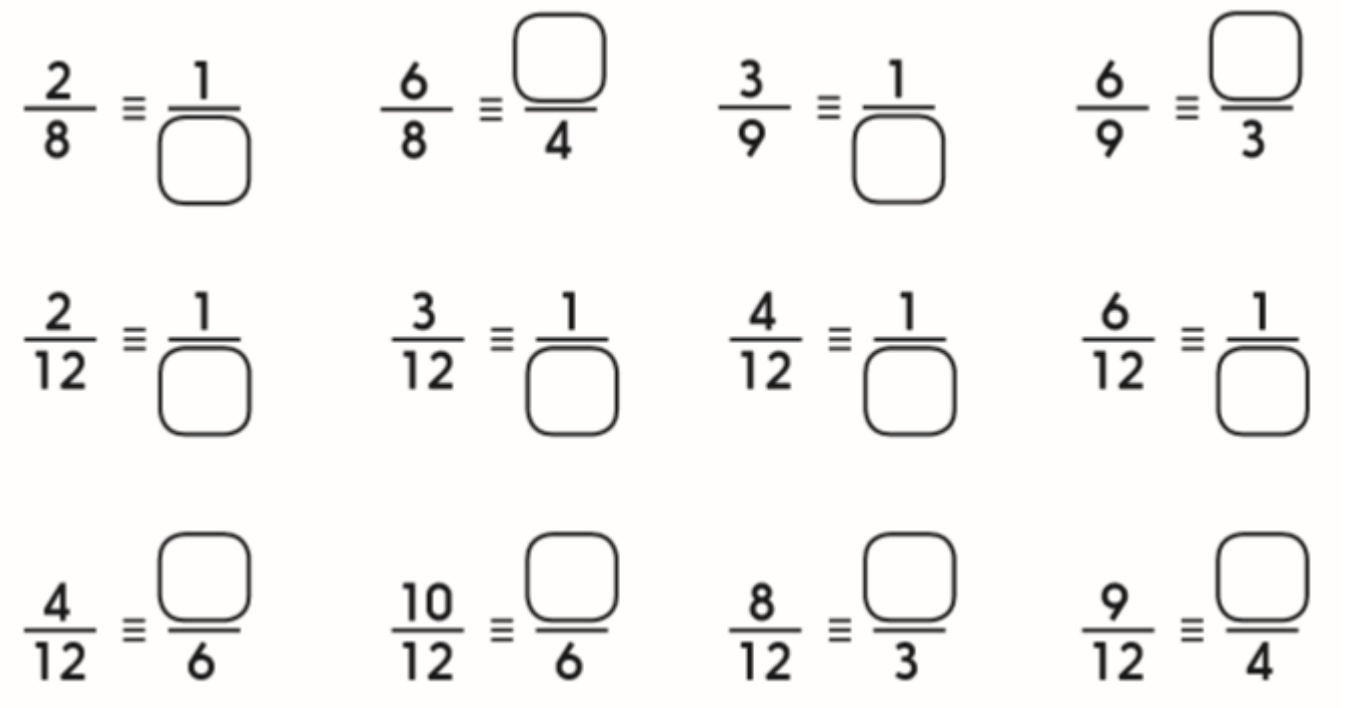
Challenge: Write at least two more fractions equivalent to 1/2 and two more equivalent to 1/4.

<u>Activity 2:</u> Use the fraction wall to help you to write pairs of equivalent fractions. Can you find the missing numbers? Use the learning reminders above to help you.

Remember to use the numbers that you have and think about what you have done to the top you must do the same to the bottom. For example, if you have a 2 and a 1 as your denominator, you have halved the 2 to get 1 (divided by 2) so you must do the same to the bottom number (8 divided by 2).

This should give you your answer. Use this method or the fraction wall to help you answer these questions.





Challenge: Can you think of any other fractions that each of these fractions are equivalent to? Remember, when finding equivalent fractions, as long as you do the same to the top AND the bottom (e.g. multiplying or dividing by the same number) then you will have an equivalent fraction.