EQUIVALENT FRACTIONS

Learning Goal: to make equivalent fractions by multiplying or dividing by one whole.

Example:

One whole

$$\frac{10}{15} \div \frac{5}{5} = \frac{2}{3}$$

a) $\dfrac{2}{3} \times \dfrac{2}{2} = $ ____   f) $\dfrac{14}{22} \div \dfrac{2}{2} = $ ____

b) $\dfrac{6}{7} \times \dfrac{3}{3} = $ ____   g) $\dfrac{12}{20} \div \dfrac{4}{4} = $ ____

c) $\dfrac{4}{9} \times \dfrac{5}{5} = $ ____   h) $\dfrac{21}{24} \div \dfrac{3}{3} = $ ____

Multiply or Divide by the **same number** at the bottom & the top

Examples :

$\dfrac{1}{2} \overset{\text{X 4}}{\underset{\text{X 4}}{=}} \dfrac{4}{8}$

$\dfrac{1}{3} \overset{\text{x}}{\underset{\text{x}}{=}} \dfrac{}{9}$

$\dfrac{8}{12} \overset{\div}{\underset{\div}{=}} \dfrac{}{3}$

$\dfrac{3}{5} \overset{\text{x}}{\underset{\text{x}}{=}} \dfrac{}{10}$

$\dfrac{}{8} \overset{\div}{\underset{\div}{=}} \dfrac{2}{4}$

Examples :

$\dfrac{4}{10} \overset{\div 2}{\underset{\div 2}{=}} \dfrac{2}{5}$

$\dfrac{2}{3} \overset{\text{x}}{\underset{\text{x}}{=}} \dfrac{}{6}$

$\dfrac{4}{4} \overset{\div}{\underset{\div}{=}} \dfrac{}{2}$

$\dfrac{6}{12} \overset{\div}{\underset{\div}{=}} \dfrac{}{2}$

$\dfrac{5}{10} \overset{\div}{\underset{\div}{=}} \dfrac{}{2}$

Guys, please complete the following project tasks
Noted : Spectacles (Kacamata)

Performance Task

WHO NEEDS SPECTACLES?

Look at your classmates. Who wears spectacles? How many of them are boys? How many of them are girls?

How many students are there in the class?

_____ students

Count and fill in the blanks. Then complete the table. (Do not forget to count yourself!)

How many are boys?

_____ boys

How many are girls?

_____ girls

How many boys wear spectacles?	How many boys do not wear spectacles?	How many girls wear spectacles?	How many girls do not wear spectacles?
_____ boys wear spectacles.	_____ boys do not wear spectacles.	_____ girls wear spectacles.	_____ girls do not wear spectacles.

❶ What fraction of the class are boys?	❷ What fraction of the class are girls?	❸ What is the fraction of boys who wear spectacles?	❹ What is the fraction of girls who wear spectacles?	❺ What fraction of the class wear spectacles?
____	____	____	____	____

Are the following pairs of fractions equivalent fractions?

a $\dfrac{2}{6}$ and $\dfrac{3}{9}$ Yes No

b $\dfrac{4}{5}$ and $\dfrac{5}{15}$ Yes No

c $\dfrac{3}{7}$ and $\dfrac{6}{24}$ Yes No

d $\dfrac{5}{8}$ and $\dfrac{30}{48}$ Yes No

e $\dfrac{70}{85}$ and $\dfrac{14}{17}$ Yes No

f $\dfrac{45}{75}$ and $\dfrac{9}{14}$ Yes