

Y3 Equivalent Fractions

KS2 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Show that $\frac{1}{2} = \frac{2}{4}$.

Step 1 · Draw a strip and shade half
1 part out of 2

Step 2 · Cut each half into 2 equal pieces
Now there are 4 parts, and 2 are shaded

Step 3 · The shaded amount has not changed
 $\frac{1}{2} = \frac{2}{4}$

Answer: $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent

Check: Fold a paper square in half, then in half again. The same area is 2 quarters.

2. Now try one with the steps

Find the missing number: $\frac{1}{3} = \frac{__}{6}$

Step 1 · Thirds to sixths: each third is cut into 2

Step 2 · The 1 shaded third becomes 2 sixths

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. $\frac{1}{2} = \frac{__}{4}$. What is the missing number?

2. $\frac{1}{2} = \frac{__}{6}$. What is the missing number?

3. $\frac{1}{2} = \frac{__}{10}$. What is the missing number?

4. $\frac{1}{4} = \frac{__}{8}$. What is the missing number?

5. $\frac{1}{3} = \frac{\quad}{6}$. What is the missing number?

6. Are $\frac{2}{4}$ and $\frac{1}{2}$ equivalent? Write yes or no.

7. Are $\frac{1}{3}$ and $\frac{1}{4}$ equivalent? Write yes or no.

8. $\frac{3}{4} = \frac{\quad}{8}$. What is the missing number?

9. $\frac{2}{3} = \frac{\quad}{6}$. What is the missing number?

10. $\frac{1}{5} = \frac{2}{\quad}$. What is the missing number?

11. $\frac{4}{8} = \frac{1}{\quad}$. What is the missing number?

12. Write a fraction with a denominator of 8 that is equivalent to $\frac{1}{2}$.

13. Ella shades $\frac{3}{6}$ of a shape. Jamal shades $\frac{1}{2}$ of the same shape. Who shades more?

14. Which of these is NOT equal to $\frac{1}{2}$: $\frac{2}{4}$, $\frac{3}{6}$, $\frac{4}{6}$, $\frac{5}{10}$?

4. Before you hand it in

Saying $\frac{1}{2} = \frac{2}{3}$ because both numbers went up by 1.

Multiply (or split) the top and bottom by the SAME number: $\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$.

Thinking $\frac{2}{4}$ is bigger than $\frac{1}{2}$ because the numbers are bigger.

Draw them. 2 quarters cover exactly the same as 1 half.

Changing only the denominator, e.g. $\frac{1}{3} = \frac{1}{6}$.

If the denominator doubles, the numerator doubles too: $\frac{1}{3} = \frac{2}{6}$.

Comparing fractions drawn on wholes of different sizes.

Equivalent fractions must be fractions of the SAME whole.