

Y6 Fractions Multiply Divide

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

$\frac{1}{2} \times \frac{1}{3}$

Step 1 · This means $\frac{1}{2}$ of $\frac{1}{3}$
split a third into 2 equal parts

Step 2 · Multiply the numerators: 1×1
1

Step 3 · Multiply the denominators: 2×3
6

Answer: $\frac{1}{6}$

Check: Half of a third is a sixth ✓

2. Now try one with the steps

$\frac{2}{3} \times \frac{3}{4}$

Step 1 · Numerators: 2×3

Step 2 · Denominators: 3×4

Step 3 · Simplify $\frac{6}{12}$ (HCF 6)

Answer:

3. Practice

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

1. $\frac{1}{2} \times \frac{1}{4}$

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

3. $\frac{2}{3} \times \frac{1}{2}$ (simplest form)

4. $\frac{3}{4} \times \frac{1}{3}$ (simplest form)

5. $\frac{2}{5} \times \frac{3}{4}$ (simplest form)

6. $\frac{4}{5} \times \frac{2}{3}$

7. $\frac{5}{6} \times \frac{3}{10}$ (simplest form)

8. $\frac{3}{8} \times \frac{4}{9}$ (simplest form)

9. What is $\frac{1}{2}$ of $\frac{3}{4}$?

10. $\frac{2}{3} \times \frac{2}{3}$

11. Which is bigger: $\frac{2}{3} \times \frac{3}{4}$, or $\frac{3}{4}$? Explain.

12. Kim has $\frac{3}{4}$ of a chocolate bar. She eats $\frac{2}{3}$ of what she has. What fraction of the whole bar does she eat?

13. $\frac{5}{8}$ of a field is grass. $\frac{2}{5}$ of the grass is used for football. What fraction of the whole field is used for football?

14. $? \times \frac{1}{3} = \frac{1}{12}$. What is the missing fraction?

15. Explain why multiplying two proper fractions always gives an answer smaller than both of them.

4. Before you hand it in

Finding a common denominator first: $2/3 \times 3/4 = 8/12 \times 9/12 = 72/12$.

To multiply, there is no need for a common denominator. Multiply the numerators and multiply the denominators: $6/12 = 1/2$.

$2/3 \times 3/4 = 6/4$.

Multiply both: $(2 \times 3)/(3 \times 4) = 6/12$.

Expecting the answer to be bigger, because 'multiplying makes bigger'.

Multiplying by a proper fraction finds part of the amount, so the answer gets smaller.

Leaving 15/30 answer.

Use the HCF: $15/30 = 1/2$. Look for numbers that cancel before multiplying.