

Y6 Dividing Fractions

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

$$6/7 \div 3$$

Step 1 · 6 sevenths shared into 3 equal groups

$$6 \div 3 = 2$$

Step 2 · The parts are still sevenths

$$2/7$$

Answer: $2/7$

Check: $2/7 \times 3 = 6/7$ ✓

2. Now try one with the steps

$$1/3 \div 2$$

Step 1 · 1 cannot be halved into whole parts, so use an equivalent fraction

$$\text{Step 2} \cdot 2/6 \div 2$$

Answer:

3. Practice

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

1. $4/5 \div 2$

2. $6/7 \div 2$

3. $9/10 \div 3$

4. $1/2 \div 3$

5. $\frac{1}{4} \div 2$

6. $\frac{2}{3} \div 5$

7. $\frac{3}{5} \div 4$

8. $\frac{3}{4} \div 6$ (simplest form)

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

10. $\frac{5}{6} \div 10$ (simplest form)

11. Half a cake is shared equally between 4 friends. What fraction of the whole cake does each friend get?

12. A plank $\frac{3}{4}$ m long is cut into 3 equal pieces. How long is each piece?

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

14. Work out $\frac{2}{5} \div 4$ and $\frac{1}{4}$ of $\frac{2}{5}$. What do you notice?

15. Which is bigger: $\frac{3}{4} \div 3$ or $\frac{2}{3} \div 2$?

4. Before you hand it in

$2/3 \div 4 = 8/3.$

Dividing makes the amount smaller. Split each third into 4: the denominator becomes 12, so $2/12 = 1/6$.

$4/8 \div 2 = 2/4.$

Dividing top and bottom by the same number gives an equivalent fraction ($2/4 = 4/8$), not a smaller amount. Divide only the numerator: $4/8 \div 2 = 2/8 = 1/4$.

$1/3 \div 2 = 1.5/3.$

Use an equivalent fraction first ($1/3 = 2/6$, then $2/6 \div 2 = 1/6$), or multiply the denominator: $1/6$.