

## Dividing Fractions

**KEEP** (the same)      **FLIP** (Flip fraction over)

**KISSY** (change ÷ to x)

$$\frac{2}{5} \div \frac{2}{3} \rightarrow \frac{2}{5} \times \frac{3}{2}$$

Invert the numerator and denominator to make the problem a multiplication problem.

Multiply the numerators. Multiply the Denominators.

$$\frac{2}{5} \times \frac{3}{2} = \frac{6}{10}$$

Simplify the fraction by dividing the numerator and denominator by the lowest common factor

$$\frac{6}{10} = \frac{3}{5}$$



To divide a fraction by an integer, you use the method on the left, but first you must put your whole number over 1, to make it into a fraction.

Eg.  $\frac{2}{5} \div 3$  would become  $\frac{2}{5} \div \frac{3}{1}$

Now you can use "Keep, Kissy, Flip.

Keep the first fraction as it is.

Turn the ÷ into a kiss (x)

Flip the last fraction over, so it is upside down.

Now complete it as a multiplication.

A

1	$\frac{1}{2} \div 3 =$	2	$\frac{1}{4} \div 2 =$	3	$\frac{1}{3} \div 4 =$
4	$\frac{1}{5} \div 3 =$	5	$\frac{2}{3} \div 6 =$	6	$\frac{3}{12} \div 2 =$
7	$\frac{4}{12} \div 4 =$	8	$\frac{9}{10} \div 3 =$	9	$\frac{8}{9} \div 2 =$

B

10  $\frac{1}{\square} \div 2 = \frac{1}{10}$

11  $\frac{1}{\square} \div 4 = \frac{1}{12}$

12  $\frac{1}{5} \div \square = \frac{1}{25}$

13  $\frac{2}{\square} \div 2 = \frac{1}{3}$

14  $\frac{9}{\square} \div 3 = \frac{3}{10}$

15  $\frac{18}{25} \div \square = \frac{9}{25}$

C

16 Eve has half a packet of sweets. She shares these sweets between 3 bowls.  
What fraction of a full packet does each bowl contain?



17 Children in Class 6B chose to play either football or rounders in a PE lesson.  
One third of the children chose rounders. The rest chose football.  
The children that chose football were put into 4 equal sized teams.  
Tick the fraction of children in Class 6B that were in one football team.

$\frac{1}{12}$        $\frac{1}{4}$        $\frac{1}{6}$        $\frac{1}{3}$

## Answers

A

$$1 \quad \frac{1}{2} \div 3 = \frac{1 \div 3}{2 \quad 1} = \frac{1 \times 1}{2 \quad 3 \quad 6} = \frac{1}{6}$$

$$2 \quad \frac{1}{4} \div 2 = \frac{1 \div 2}{4 \quad 1} = \frac{1 \times 1}{4 \quad 2 \quad 8} = \frac{1}{8}$$

$$3 \quad \frac{1}{3} \div 4 = \frac{1 \div 4}{3 \quad 1} = \frac{1 \times 1}{3 \quad 4 \quad 12} = \frac{1}{12}$$

$$4 \quad \frac{1}{5} \div 3 = \frac{1 \div 3}{5 \quad 1} = \frac{1 \times 1}{5 \quad 3 \quad 15} = \frac{1}{15}$$

$$5 \quad \frac{2}{3} \div 6 = \frac{2 \div 6}{3 \quad 1} = \frac{2 \times 1}{3 \quad 6 \quad 18 \quad 9} = \frac{2}{18} = \frac{1}{9}$$

$$6 \quad \frac{3}{12} \div 2 = \frac{3 \div 2}{12 \quad 1} = \frac{3 \times 1}{12 \quad 2 \quad 24 \quad 8} = \frac{3}{24} = \frac{1}{8}$$

$$7 \quad \frac{4}{12} \div 4 = \frac{4 \div 4}{12 \quad 1} = \frac{4 \times 1}{12 \quad 4 \quad 48 \quad 12} = \frac{4}{48} = \frac{1}{12}$$

$$8 \quad \frac{9}{10} \div 3 = \frac{9 \div 3}{10 \quad 1} = \frac{9 \times 1}{10 \quad 3 \quad 30 \quad 10} = \frac{9}{30} = \frac{3}{10}$$

$$9 \quad \frac{8}{9} \div 2 = \frac{8 \div 2}{9 \quad 1} = \frac{8 \times 1}{9 \quad 2 \quad 18 \quad 7} = \frac{8}{18} = \frac{4}{9}$$

**B**

10

$$\frac{1}{\boxed{5}} \div 2 = \frac{1}{10}$$

11

$$\frac{1}{\boxed{3}} \div 4 = \frac{1}{12}$$

12

$$\frac{1}{5} \div \boxed{5} = \frac{1}{25}$$

13

$$\frac{2}{\boxed{3}} \div 2 = \frac{1}{3}$$

14

$$\frac{9}{\boxed{10}} \div 3 = \frac{3}{10}$$

15

$$\frac{18}{25} \div \boxed{2} = \frac{9}{25}$$

**C**

16

Eve has half a packet of sweets. She shares these sweets between 3 bowls.

What fraction of a full packet does each bowl contain?

$$\frac{1}{2} \div \frac{3}{1} =$$

$$\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$$



17

Children in Class 6B chose to play either football or rounders in a PE lesson.

One third of the children chose rounders. The rest chose football.

The children that chose football were put into 4 equal sized teams.

Tick the fraction of children in Class 6B that were in one football team.

$$\frac{1}{12} \quad \frac{1}{4} \quad \frac{1}{6} \quad \frac{1}{3}$$