

# Dividing Fractions

Skill: Multiply and divide fractions and mixed numbers

To divide fractions, you have to multiply.

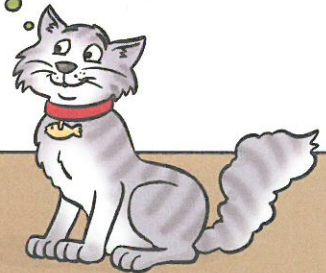
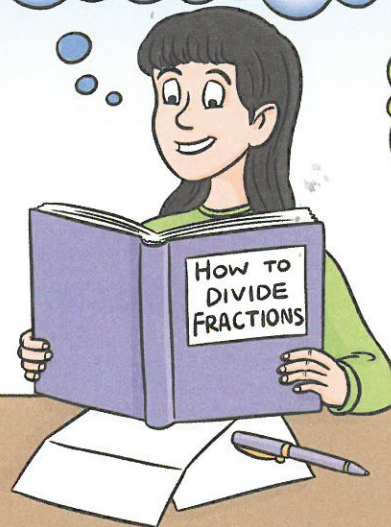
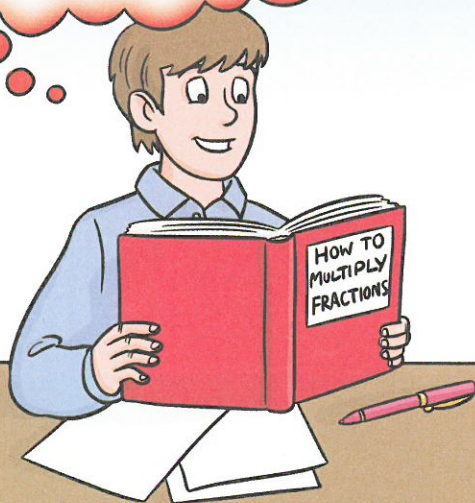
$$\frac{\text{numerator} \times \text{numerator}}{\text{denominator} \times \text{denominator}}$$

$$\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$$

Invert the divisor  
and multiply.

$$\frac{3}{4} \div \frac{1}{2} = \frac{3}{4} \times \frac{2}{1} = \frac{6}{4} = 1\frac{1}{2}$$

Invert the  
divisor means to  
multiply by the  
reciprocal.



**1** Lay out the mats and sort the cards by size into two groups: division problems and answer cards.

**2** Look at the multiplication equation in each row on the mats and find the card with the related division problem. Remember: To divide fractions, you have to multiply the first fraction by the reciprocal of the second fraction.

**3** Do the multiplication and place the correct answer card in the colored square.

**4** Complete the response form.

**Dividing Fractions**

1	$\frac{1}{5} \div \frac{4}{7} =$	$\frac{1}{5} \times \frac{7}{4} =$	$\frac{7}{20}$
2	division problem	$\frac{1}{2} \times \frac{8}{8} =$	answer
3	division problem	$\frac{2}{6} \times \frac{7}{7} =$	answer
4	division problem	$\frac{1}{8} \times \frac{10}{10} =$	answer
5	division problem	$\frac{7}{8} \times \frac{4}{4} =$	answer
6	division problem	$\frac{5}{6} \times \frac{8}{8} =$	answer

Scattered cards:

- $\frac{7}{8} \div \frac{1}{4} =$
- $\frac{5}{6} \div \frac{3}{8} =$
- $2\frac{1}{3} \div 7\frac{7}{8} =$
- $\frac{40}{18}$
- $\frac{6}{9}$
- $\frac{104}{165}$

# Dividing Fractions

1

division problem

$$\frac{1}{5} \times \frac{7}{4} =$$

answer

2

division problem

$$\frac{1}{2} \times \frac{16}{13} =$$

answer

3

division problem

$$\frac{2}{9} \times \frac{3}{1} =$$

answer

4

division problem

$$\frac{1}{8} \times \frac{10}{9} =$$

answer

5

division problem

$$\frac{7}{8} \times \frac{4}{1} =$$

answer

6

division problem

$$\frac{5}{6} \times \frac{8}{3} =$$

answer

# Dividing Fractions

7

division problem

$$\frac{19}{20} \times \frac{2}{1} =$$

answer

8

division problem

$$\frac{9}{5} \times \frac{3}{10} =$$

answer

9

division problem

$$\frac{7}{3} \times \frac{8}{63} =$$

answer

10

division problem

$$\frac{13}{4} \times \frac{2}{9} =$$

answer

11

division problem

$$\frac{26}{5} \times \frac{4}{33} =$$

answer

12

division problem

$$\frac{20}{3} \times \frac{8}{45} =$$

answer

$\frac{1}{5} \div \frac{4}{7} =$	$\frac{1}{2} \div \frac{13}{16} =$	$\frac{7}{20}$	$\frac{16}{26}$
$\frac{2}{9} \div \frac{1}{3} =$	$\frac{1}{8} \div \frac{9}{10} =$	$\frac{6}{9}$	$\frac{10}{72}$
$\frac{7}{8} \div \frac{1}{4} =$	$\frac{5}{6} \div \frac{3}{8} =$	$\frac{28}{8}$	$\frac{27}{50}$
$\frac{19}{20} \div \frac{1}{2} =$	$1\frac{4}{5} \div 3\frac{1}{3} =$	$\frac{38}{20}$	$\frac{40}{18}$
$2\frac{1}{3} \div 7\frac{7}{8} =$	$3\frac{1}{4} \div 4\frac{1}{2} =$	$\frac{56}{189}$	$\frac{26}{36}$
$5\frac{1}{5} \div 8\frac{1}{4} =$	$6\frac{2}{3} \div 5\frac{5}{8} =$	$\frac{104}{165}$	$\frac{160}{135}$

# Dividing Fractions

Look at the mats. Write the answer to each problem in its simplest form on the lines below.

1 \_\_\_\_\_

4 \_\_\_\_\_

7 \_\_\_\_\_

10 \_\_\_\_\_

2 \_\_\_\_\_

5 \_\_\_\_\_

8 \_\_\_\_\_

11 \_\_\_\_\_

3 \_\_\_\_\_

6 \_\_\_\_\_

9 \_\_\_\_\_

12 \_\_\_\_\_

Show your work to complete each division problem and write the answer in its simplest form.

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

2  $1\frac{7}{8} \div 2\frac{1}{3} =$  \_\_\_\_\_

3  $4\frac{1}{2} \div 5\frac{2}{3} =$  \_\_\_\_\_

4  $2\frac{1}{2} \div 4\frac{4}{5} =$  \_\_\_\_\_

5  $3\frac{1}{9} \div 2\frac{2}{5} =$  \_\_\_\_\_

6  $10\frac{2}{3} \div 11\frac{1}{8} =$  \_\_\_\_\_