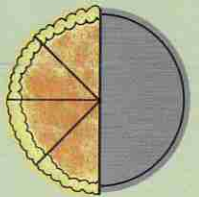


Dividing fractions

Divide proper fractions by whole numbers



Example

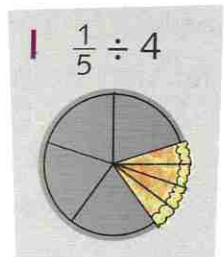
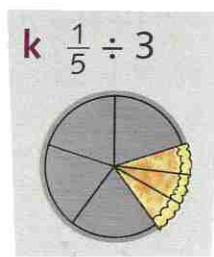
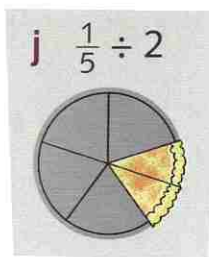
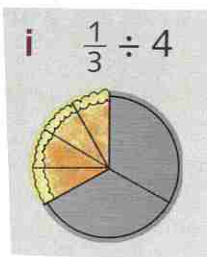
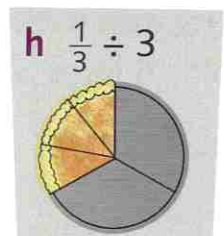
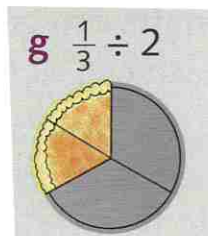
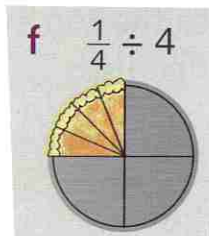
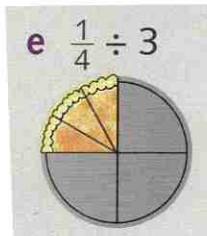
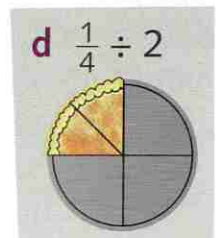
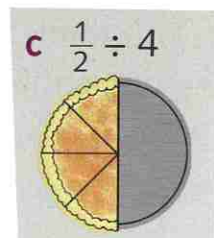
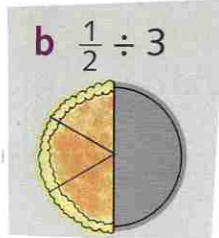
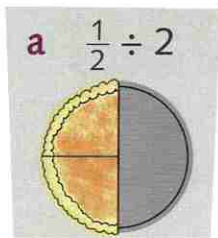


$$\frac{1}{2} \div 4 = \frac{1}{8}$$

Challenge

1

In this question the fractions are represented as pizzas. Divide the fractions by the whole numbers and use the diagrams to see how much each person gets.



Challenge

2

1 Work out these fraction divisions. Give each answer in its simplest form.

a $\frac{2}{3} \div 3$

b $\frac{2}{5} \div 2$

c $\frac{3}{5} \div 3$

d $\frac{4}{6} \div 2$

e $\frac{2}{6} \div 3$

f $\frac{3}{4} \div 3$

g $\frac{3}{4} \div 4$

h $\frac{2}{8} \div 2$

i $\frac{5}{8} \div 3$

j $\frac{4}{10} \div 2$

k $\frac{6}{10} \div 3$

l $\frac{4}{5} \div 4$

Example

$$\frac{2}{5} \div 4 = \frac{2}{20} = \frac{1}{10}$$

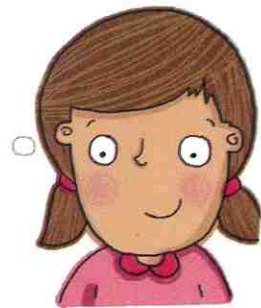
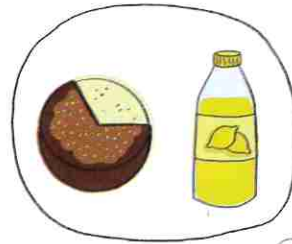


2 Answer these word problems.

- a Lucas the chef uses $\frac{2}{3}$ kg of flour to bake 4 cakes. What weight of flour does he use to bake each cake?
- b Lucas uses $\frac{3}{5}$ of a bag of icing sugar to ice his 4 cakes. How much of the bag of icing sugar does he use to ice each cake?
- c Lucas uses $\frac{1}{6}$ of a bag of sprinkles to decorate the 4 cakes. How much of the bag of sprinkles does he use to decorate each cake?

3 Think of a time when you and your family or friends have shared something that was less than one whole. Draw a diagram and write the fraction division to go with it.

1 Explain why the method for dividing fractions works. Use diagrams as part of your explanation.



2 Work out these fraction divisions. Give each answer in its simplest form.

a $\frac{5}{8} \div 6$

b $\frac{4}{7} \div 5$

c $\frac{3}{4} \div 7$

d $\frac{6}{9} \div 5$

e $\frac{8}{10} \div 6$

f $\frac{7}{11} \div 4$

g $\frac{9}{12} \div 5$

h $\frac{2}{8} \div 6$

i $\frac{4}{10} \div 6$

j $\frac{3}{9} \div 6$

k $\frac{8}{13} \div 4$

l $\frac{10}{15} \div 6$

m $\frac{4}{10} \div 5$

n $\frac{7}{11} \div 4$

o $\frac{3}{8} \div 3$

p $\frac{6}{14} \div 7$

3 Divide this fraction by five different whole numbers.

$\frac{8}{10}$

4 Choose four calculations from Question 2 and write a word problem to go with each of them.

