

17.1.22

Can you multiply two fractions together?

- 7 Dora thinks of a positive whole number. She says,
- It is an odd number less than 30
 - It is one more than a multiple of 11
- Is her number prime?
Explain your reasoning.

mixed fraction

proper fraction

improper fraction

denominator

numerator

fraction

How do we multiply 2 fractions together?

Calculate

$$1/5 \times 3/10 =$$

$$1/2 \times 3/10 =$$

$$1/4 \times 3/5 =$$

Task

$$1/5 \times 3/10 =$$

$$1/2 \times 1/4 =$$

$$1/4 \times 2/3 =$$

$$3/4 \times 1/2 =$$

$$1/5 \times 3/4 =$$

$$1/5 \times 1/3 =$$

$$1/3 \times 3/10 =$$

$$2/3 \times 2/5 =$$

$$1/2 \times 3/8 =$$

$$3/4 \times 2/5 =$$

$$1/4 \times 2/5 =$$

$$2/3 \times 5/6 =$$

$$1/5 \times 3/8 =$$

Plenary

How many ways can you complete the missing digits?

$$\begin{array}{c} \text{☀} \\ \hline \text{☀} \end{array} \times \frac{3}{\text{☀}} = \frac{6}{12}$$
$$\begin{array}{c} \text{☀} \\ \hline \text{☀} \end{array} = \frac{\text{☀}}{2}$$

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Can you divide unit fractions by an integer?

8 Complete the table by putting the labels in the correct place.

A Square number

C Multiple of 6

B Not a square number

D Not a multiple of 6

	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	36 144	6 24 60 18
D	9 16 100 25 49	7 15 31

What do these words mean?

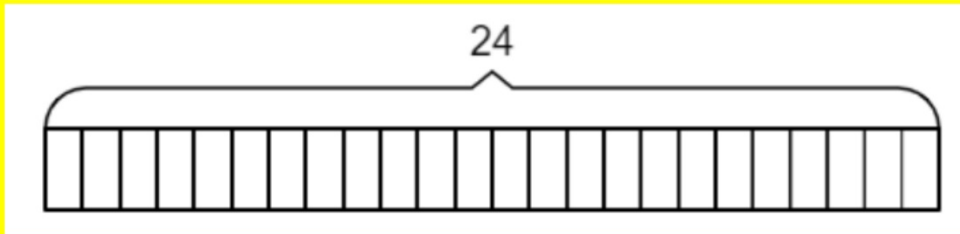
Fraction

Proper fraction

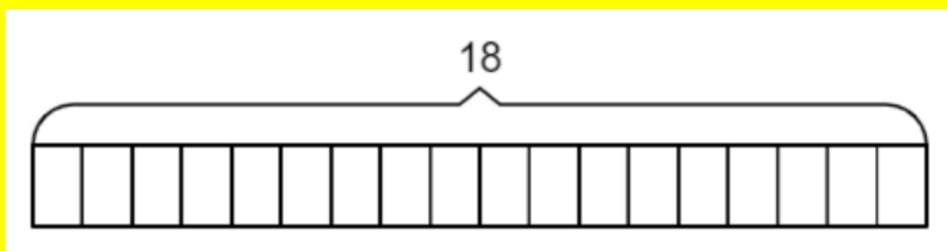
Divide

Integer

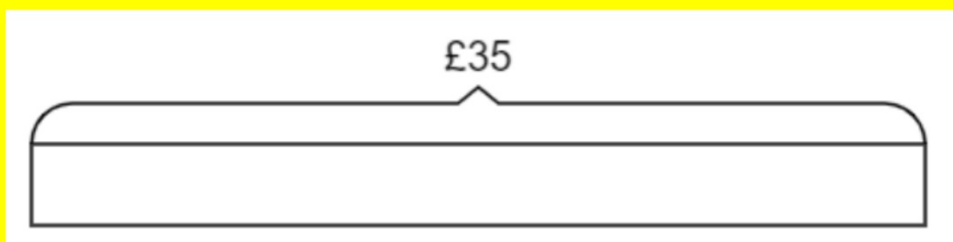
24 apples are shared between 6 children.
How many apples does each child get?



18 pencils are shared between 3 children. How many pencils does each child get?

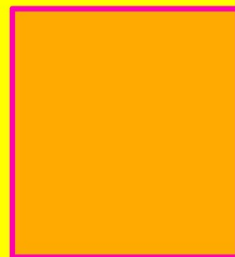
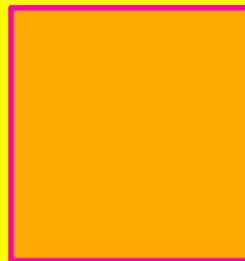


5 children earn £35 washing cars. How much money does each child get?



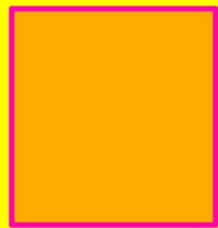
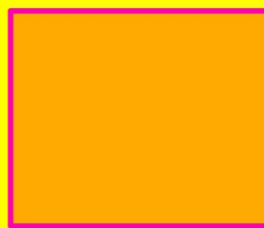


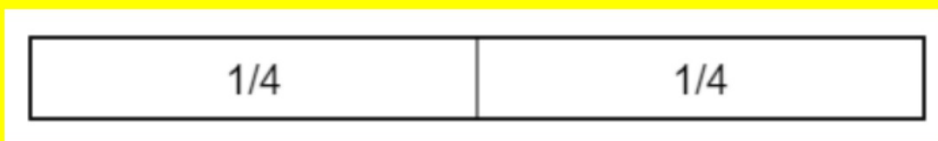
$$2 \div 2 =$$





$$4 \div 2 =$$





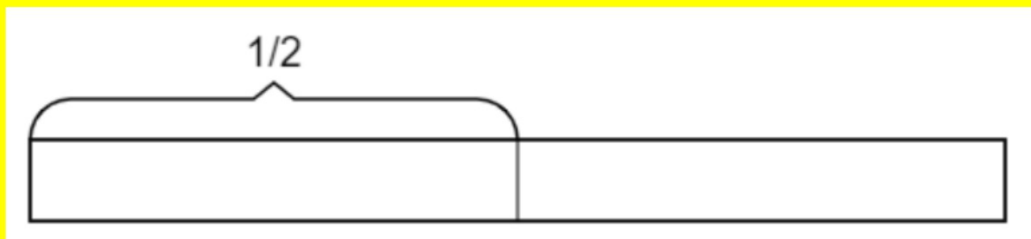
$$2 \div 2 =$$

4

$$1 \text{ of } 2 = \quad 1 \times 2 =$$

2 4 2 4

I have $\frac{1}{2}$ a bar of chocolate and I want to share it with 2 people. How much of the chocolate bar would they each get?



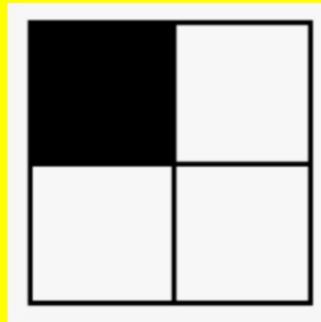
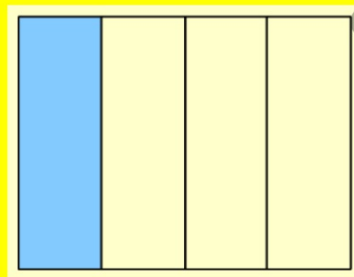
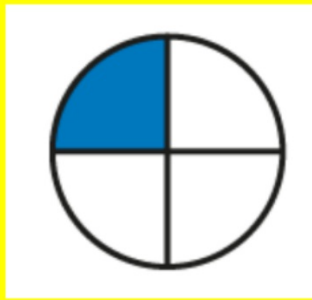
$$\frac{1}{2} \div 2 =$$
$$\frac{1}{4}$$

There is $\frac{1}{3}$ of a cake left. How much of the
would two people get?



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

How would I share $\frac{1}{4}$ into 3 equal parts?



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

What do you notice?

$$\begin{array}{r} 1 \div 2 = 1 \\ 2 \quad 4 \end{array}$$

$$\begin{array}{r} 1 \div 3 = 1 \\ 4 \quad 12 \end{array}$$

$$\begin{array}{r} 1 \div 2 = 1 \\ 3 \quad 6 \end{array}$$

If we are dividing by 2 we are finding $\frac{1}{2}$ of an amount.

If we are dividing by 3 we are finding $\frac{1}{3}$ of an amount.

If we are dividing by 4 we are finding $\frac{1}{4}$ of an amount.

If we are dividing by 5 we are finding of an amount.

If we are dividing by 6 we are finding of an amount.

Try and write the related multiplication sentence.

$$1 \div 2 =$$

4

$$1 \div 9 =$$

3

Task - draw a diagram to represent each calculation

$$1 \div 2 =$$

6

$$1 \div 2 =$$

8

$$1 \div 3 =$$

4

$$1 \div 4 =$$

3

19.01.22

Can you divide a fraction by an integer?

10 Harry uses these digit cards.



- He makes a 3-digit number and a 1-digit number.
- He multiplies them together.
- His answer is odd.

What could the multiplication be?

What do these words mean?

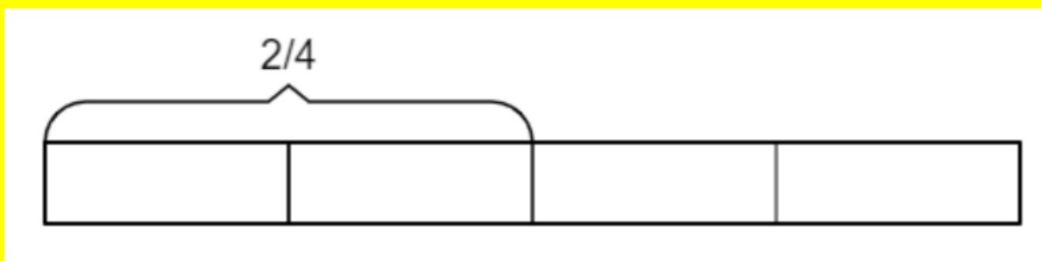
Fraction

Proper fraction

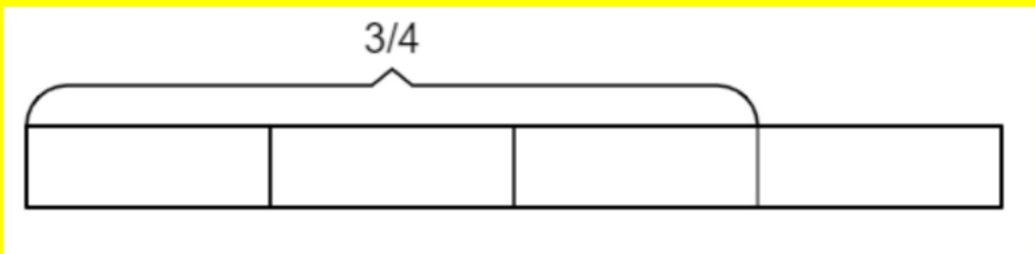
Divide

Integer

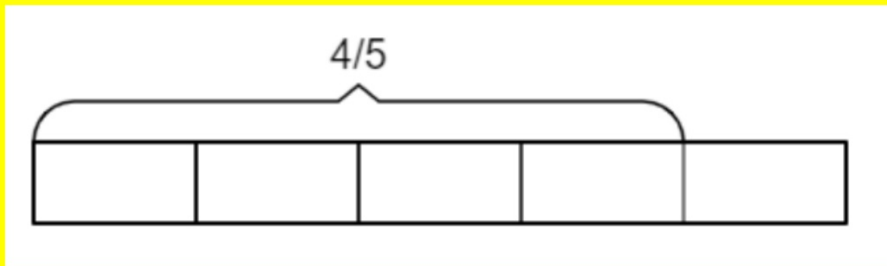
I have $\frac{2}{4}$ to share between 2 people. How much would they each get?



I have $\frac{3}{4}$ to share between 3 people. How much would they each get?



A jug is $\frac{4}{5}$ filled with juice. I need to share it equally between 2 cups. How much juice will be poured into each cup?



What do you notice?

$$\begin{array}{r} 2 \div 2 = 1 \\ 4 \quad \quad 4 \end{array}$$

$$\begin{array}{r} 3 \div 3 = 1 \\ 4 \quad \quad 4 \end{array}$$

$$\begin{array}{r} 4 \div 2 = 2 \\ 5 \quad \quad 5 \end{array}$$

Try

$$4 \div 4 =$$

5

$$9 \div 3 =$$

10

Task - draw a bar model to represent

$$4 \div 2 =$$

12

$$4 \div 2 =$$

9

$$9 \div 3 =$$

10

$$8 \div 2 =$$

9

Plenary

Match the equivalent calculations.

$$\frac{1}{4} \times \frac{12}{13}$$

$$\frac{12}{13} \div 2$$

$$\frac{1}{6} \times \frac{12}{13}$$

$$\frac{12}{13} \div 6$$

$$\frac{1}{2} \times \frac{12}{13}$$

$$\frac{12}{13} \div 4$$

$$\frac{1}{3} \times \frac{12}{13}$$

$$\frac{12}{13} \div 3$$

20.1.22

How do you divide a fraction by an integer?

$$6 \div 2 =$$

7

$$12 \div 4 =$$

13

$$20 \div 5 =$$

27

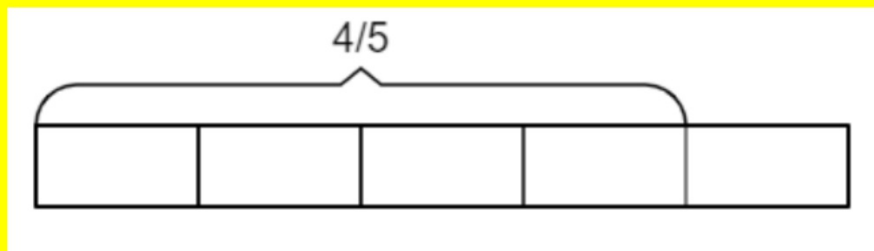
$$6 \div 6 =$$

15

How will we work this out?

$$\frac{4}{5} \div 3 =$$

5



Try



$$2 \div 3 =$$

5

$$2 \div 4 =$$

5

$$\underline{2} \div \underline{\quad} = \underline{2}$$

5 25

Dora has $\frac{3}{5}$ of cake leftover. The left over cake is to be shared equally between 4 people. How much cake would they get each?

Task

$$3 \div 2 =$$

4

$$2 \div 3 =$$

5

$$3 \div 2 =$$

5

$$3 \div 2 =$$

7

Plenary

True or false?

$$\frac{2}{5} \div 3 = \frac{2}{3} \div 5$$

21.1.22

What is a decimal?

What is a decimal?



Decimal -

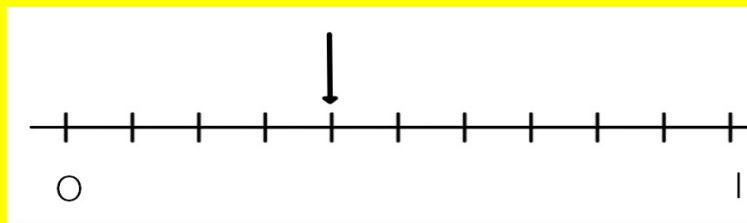
From 1600 - from Medieval Latin
decimalis meaning tenth or ten.

From root *dekm* meaning ten.

How do decimals and fractions link?

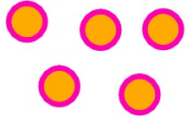

What can you tell me about:
0.28

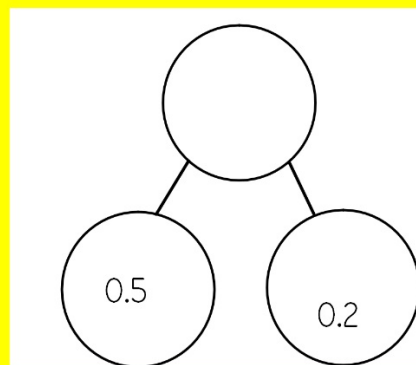
What number is this?



4
10

What number is this?

Ones	Tenths ($1/10$)	Hundredths ($1/100$)	Thousandths ($1/1000$)
			



How could you represent 0.34?

What about

3.01

0.561

2.042

Represent these numbers on a place value chart.
Show the amount of ones, tenths, hundredths and thousandths.

0.62

0.78

1.56

1.09

0.345

0.632

0.081

1.534

2.056

62.321

.

Plenary

Which is larger?

0.909 0.099 0.99