



15.1.21

Blue – Divide by 8

True or False ?

Divide by 8

To divide by 8, you divide by 4 and
then double your answer.

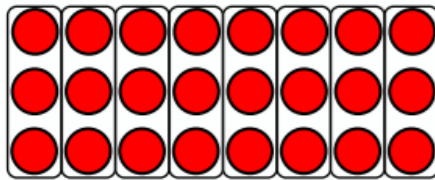


True or False?

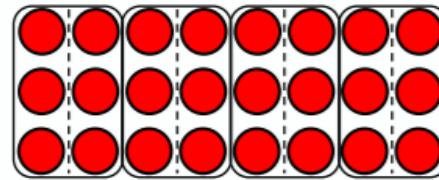
Divide by 8

False

Dividing by 4 and then doubling your answer is the same as dividing by 2



$$24 \div 8 = 3$$



$$24 \div 4 = 6$$

$$6 \div 2 = 3$$

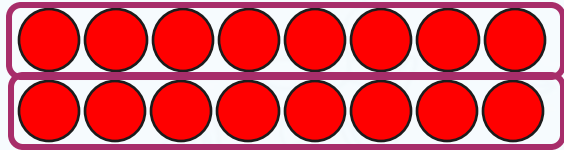
To divide by 8, you need to divide by 4
then **halve** your answer.



DIVIDE BY 8

White
Rose
Maths

Here is an 8 by 2 array



$2 \times 8 =$

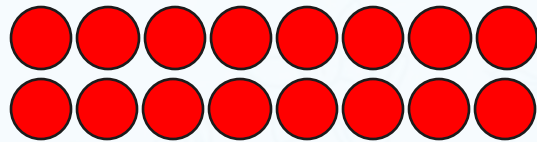
$8 \times 2 =$

$16 \div 8 =$

$16 \div 2 =$

- 1) Draw an 8 by 4 array
- 2) How many counters are there in your array?
- 3) Write 2 multiplication equations to match your array.
- 4) Write 2 division equations to match your array.

Here is an 8 by 2 array



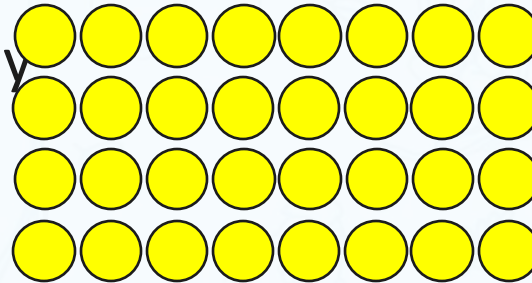
$2 \times 8 =$

$8 \times 2 =$

$16 \div 8 =$

$16 \div 2 =$

1) Draw an 8 by 4 array



2) How many counters are there in your array? **32**

3) Write 2 multiplication equations to match your array.
 $4 \times 8 =$ $8 \times 4 =$

4) Write 2 division equations to match your array.
 $32 \div 8 =$ $32 \div 4 =$

Here are 24 flowers.

Have a think



How could we divide the flowers by 8?

We could share the flowers equally between 8 pots.

We could group the flowers into pots of 8

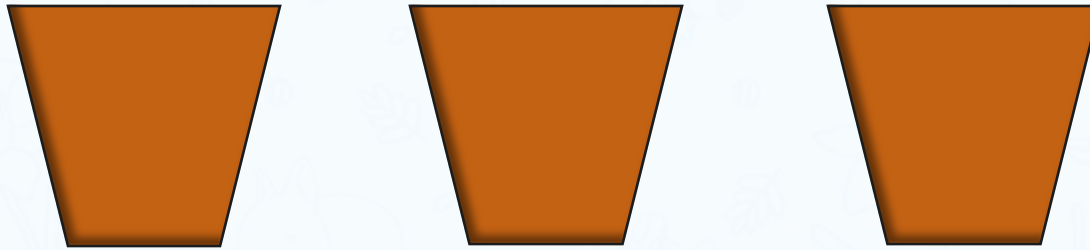
The flowers are shared equally between 8 pots.
How many flowers will be in each pot?



There are 3 flowers in each pot.

$$24 \div 8 = 3$$

The flowers are grouped into pots of 8
How many pots can we fill?



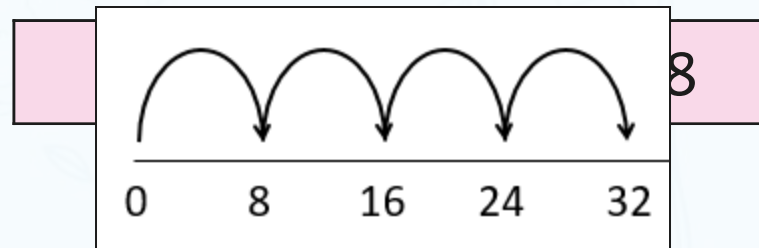
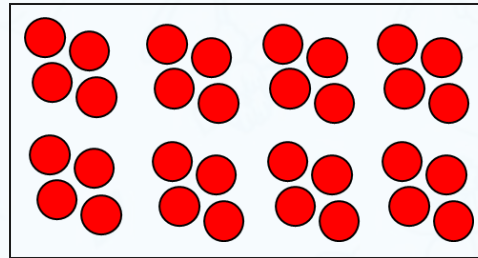
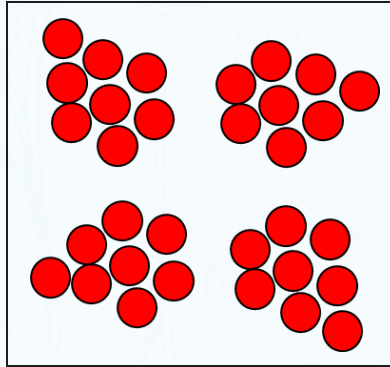
There are 3 pots of 8

$$24 \div 8 = 3$$

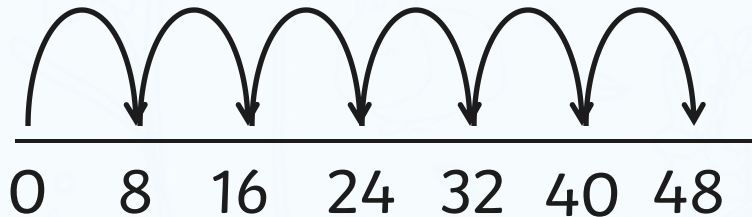
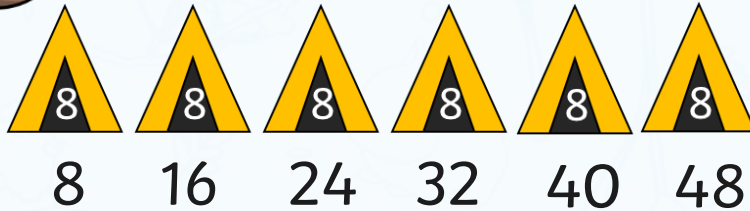
Shared into 8
equal groups

$$32 \div 8$$

Grouped
into 8s



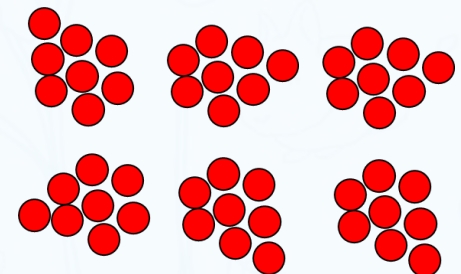
48 children go camping.
Each tent holds 8 children.
How many tents are needed?



Have a think



- 1 tent → 8 children
- 2 tents → 16 children
- 3 tents → 24 children
- 4 tents → 32 children
- 5 tents → 40 children
- 6 tents → 48 children



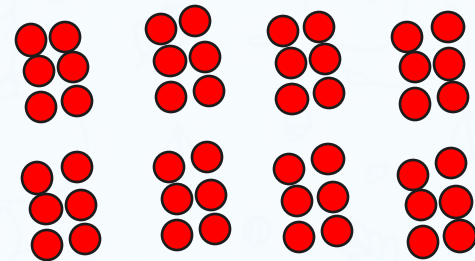
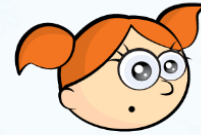
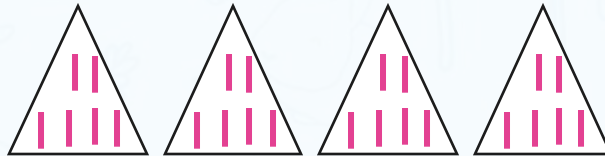
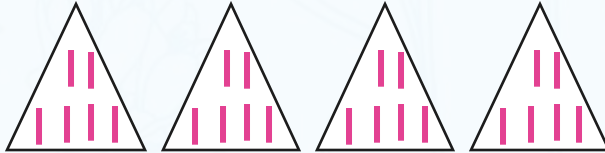
How could you represent this problem?

48 children go camping.

There are 8 tents.

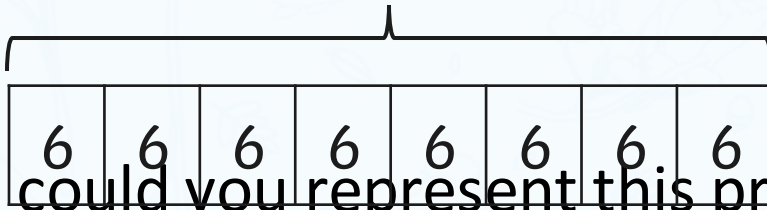
How many children will sleep in each tent?

Have a think



I know that $6 \times 8 = 48$ so
 $48 \div 8$ must be 6

48



How could you represent this problem?



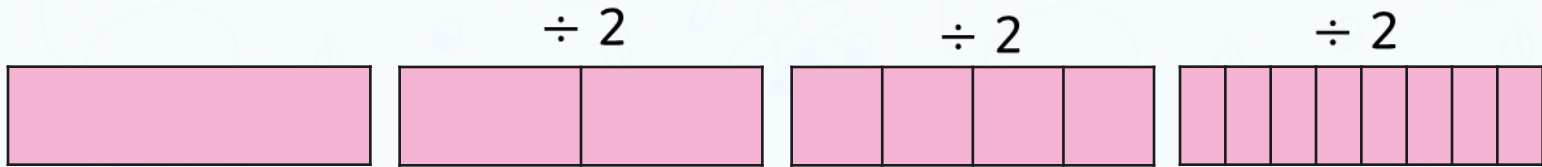
To divide by 8, take the number you are dividing and divide it by 2 four times.

$$80 \div 8 = 10$$

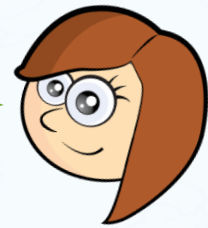
Have a think



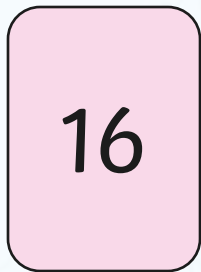
$$80 \xrightarrow{\div 2} 40 \xrightarrow{\div 2} 20 \xrightarrow{\div 2} 10$$



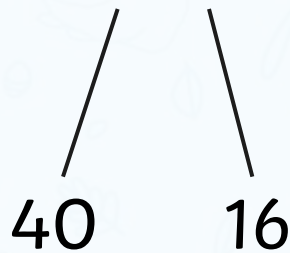
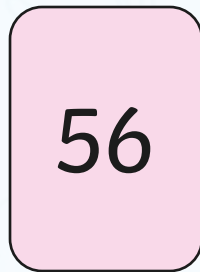
I think you only need to divide by 2 three times.



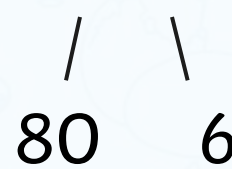
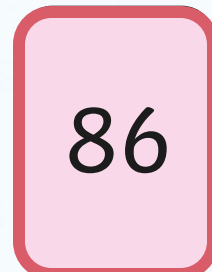
One of these numbers will not divide exactly by 8



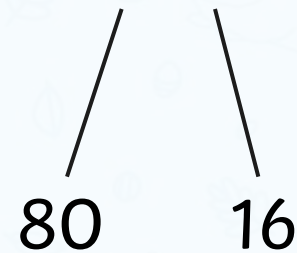
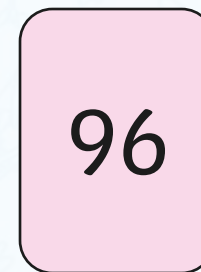
$$2 \times 8$$



$$5 \times 8 \quad 2 \times 8$$



$$10 \times 8 \quad 2 \times 8$$

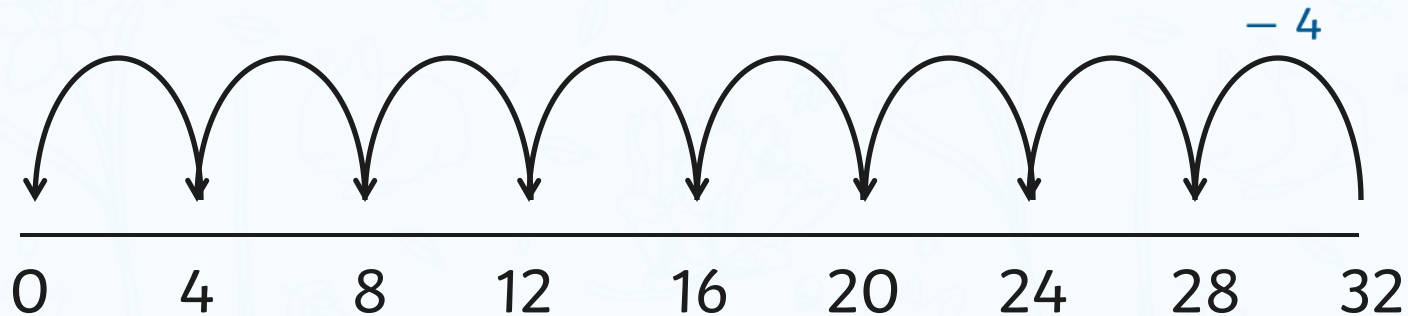
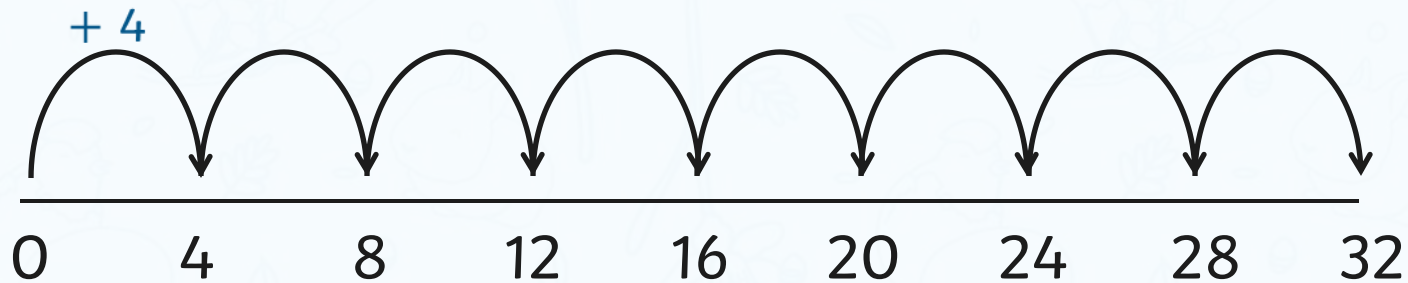


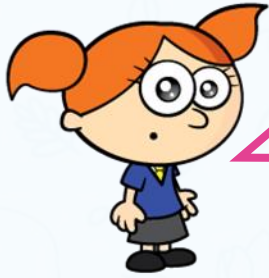
Have a think



The baker has 32 bread rolls.
He puts them into packs of 4
How many packs can he fill?

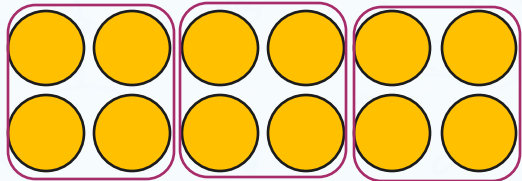
$$32 \div 4 = 8$$



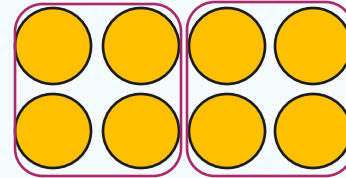


Multiples of 4 are all even numbers.
So all even numbers can be grouped into 4s

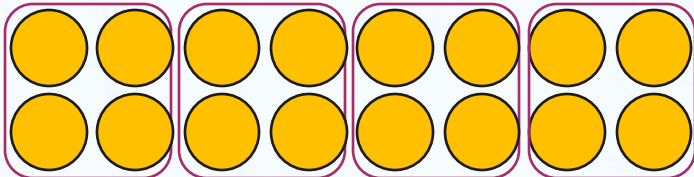
12



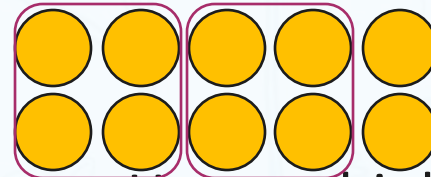
8



16



10



Have a think



Now complete your work sheet.

Now play Hit the Button game division facts $\div 8$.

<https://www.topmarks.co.uk/maths-games/hit-the-button>

