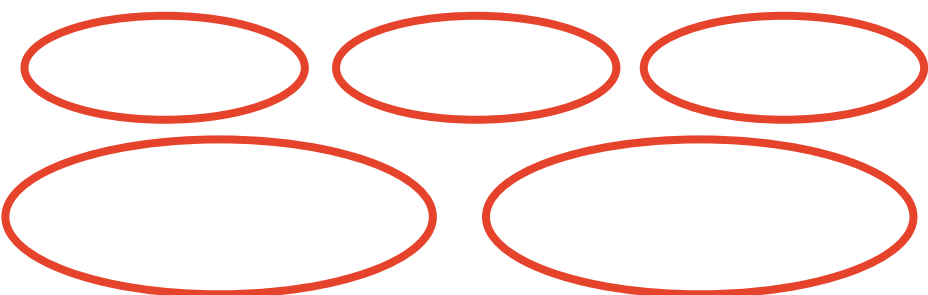


Draw it

bar



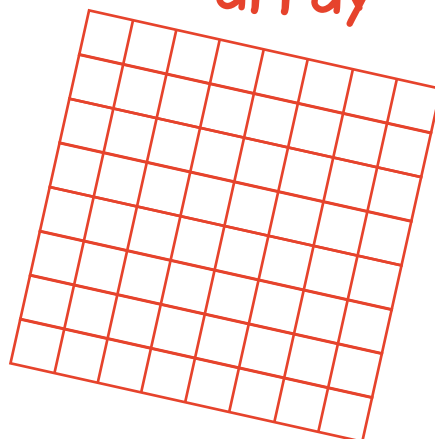
groups



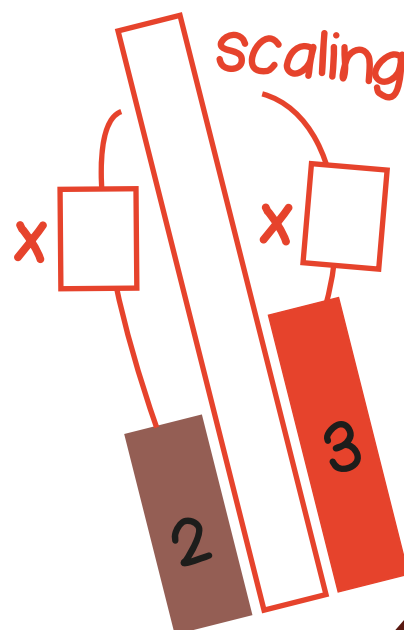
number line



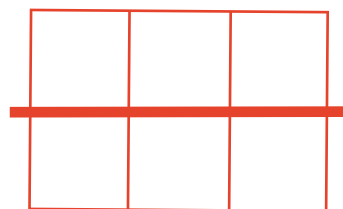
array



scaling

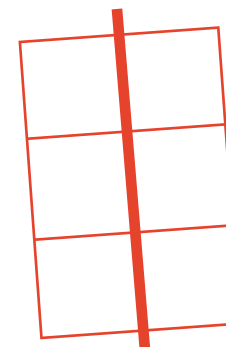


Dissect it



$$3 \times 2 = 3 + \square$$

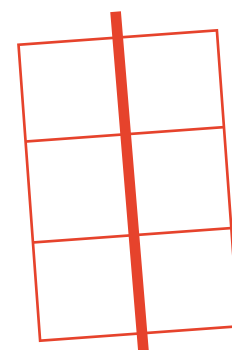
$$= \square$$



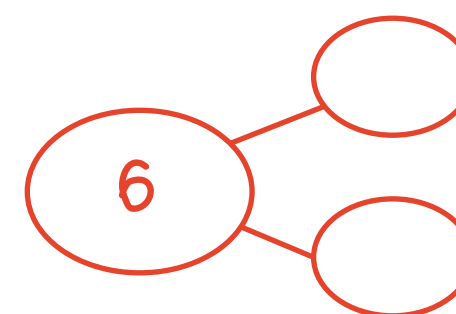
$$3 \times 2 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



$$\text{Double } 3 = \square$$



If I know $3 \times 2 = 6$ then I also know...

$$\square \times \square = 6$$

$$6 = \square \times \square$$

$$6 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$3 = 6 \div \square$$

$$6 = 2 \times \square$$

$$\frac{1}{3} \text{ of } \square = 2$$

$$\square \times 3 = 6$$



Double 6 is 3
True or false?

How many sides are there in **total** on two triangles?

Seb has £3. George has twice as much. How much has George?

Three equal bags of carrots weigh 6kg. How much does **each** bag weigh?

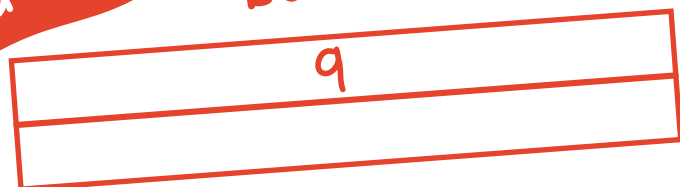
Ali buys 6 apples. He eats the same number of apples each day and they last him 3 days. How many apples does he eat **each** day?

Derive it

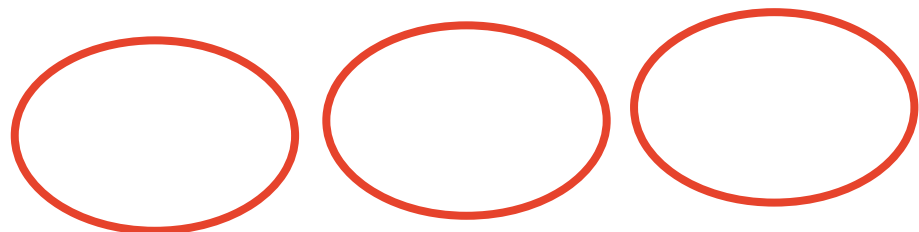
Deepen it

Draw it

bar



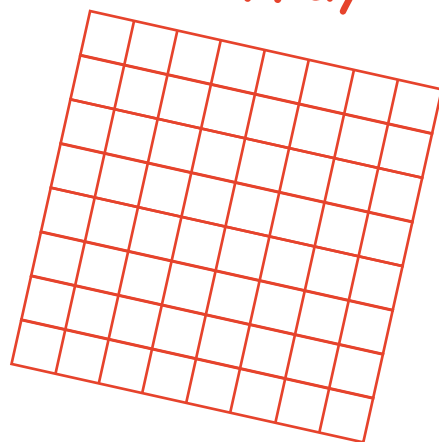
groups



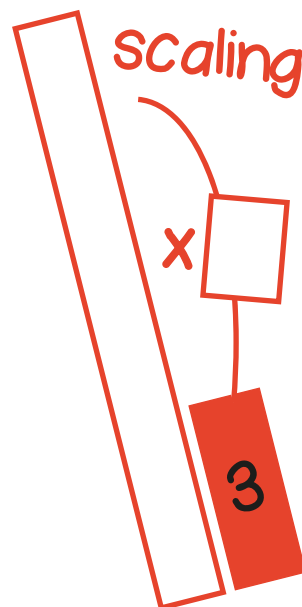
number line



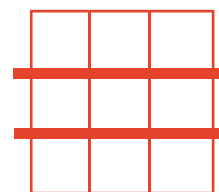
array



scaling

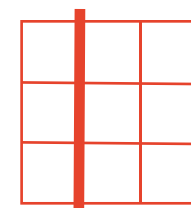


Dissect it



$$3 \times 3 = 3 + \square + \square$$

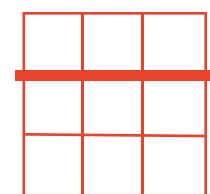
$$= \square$$



$$3 \times 3 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

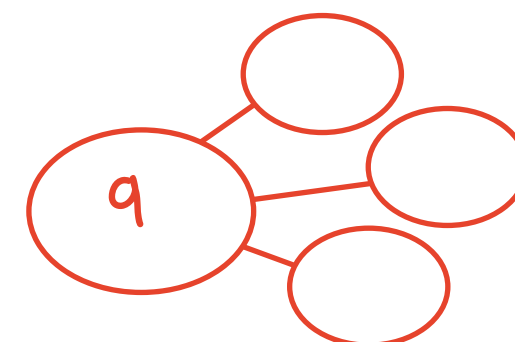
$$= \square$$



$$3 \times 3 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 3 = 9$ then I also know...

$$\square \times \square = 9$$

$$9 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ is a factor of ___

___ is a multiple of ___

$$3 = 9 \div \square$$

$$9 = 3 \times \square$$

$$\square \div 3 = 3$$

$$\frac{1}{3} \text{ of } \square = 3$$

If I draw three triangles, how many sides have I drawn **in total**?

There are three chairs in each stack. How many chairs are there in 3 stacks **altogether**?

Nine bananas are shared equally between three monkeys. How many bananas do they **each** have?

A scarf has 9 stripes. There are 3 stripes of **each** colour. How many colours are there?



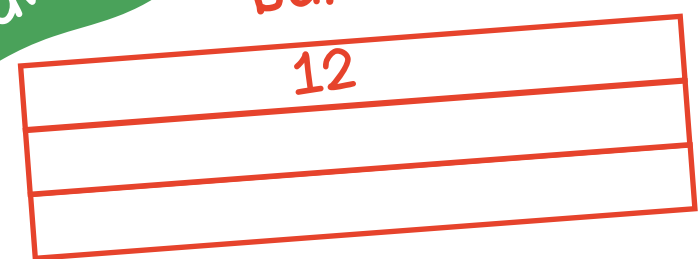
3 is a multiple of 9
True or false?

Derive it

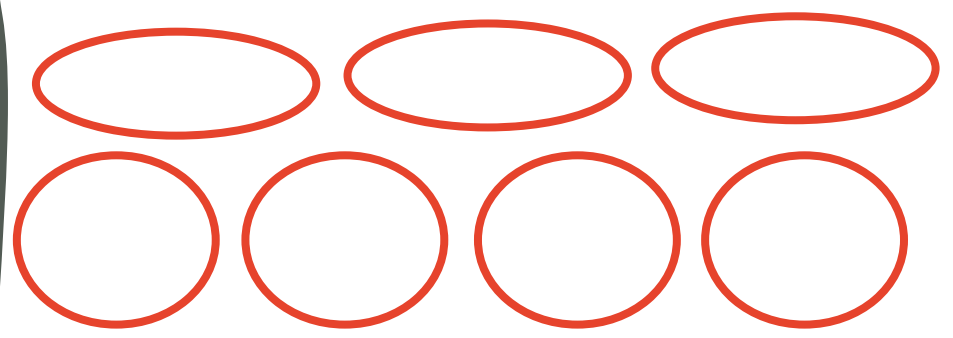
Deepen it

Draw it

bar



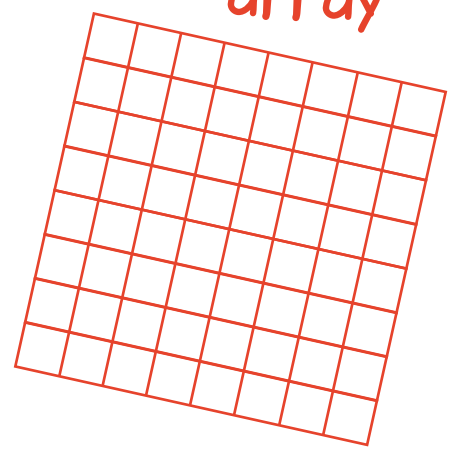
groups



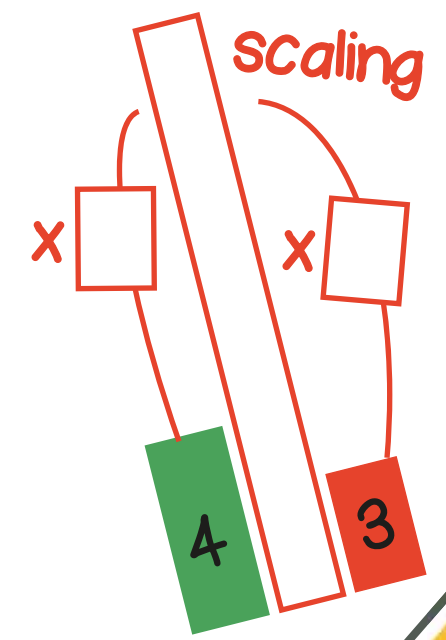
number line



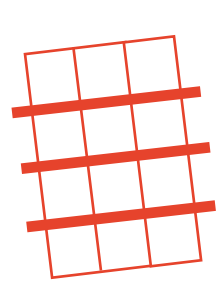
array



scaling

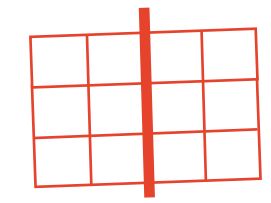


Dissect it



$$3 \times 4 = 3 + \square + 3 + \square$$

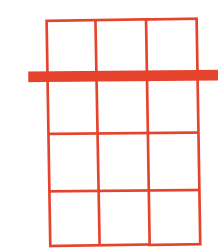
$$= \square$$



$$3 \times 4 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

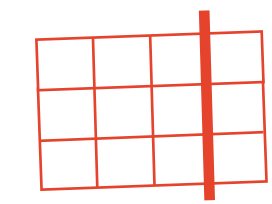
$$= \square$$



$$3 \times 4 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



$$3 \times 4 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 4 = 12$ then I also know...

$$\square \times \square = 12$$

$$12 = \square \times \square$$

$$12 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

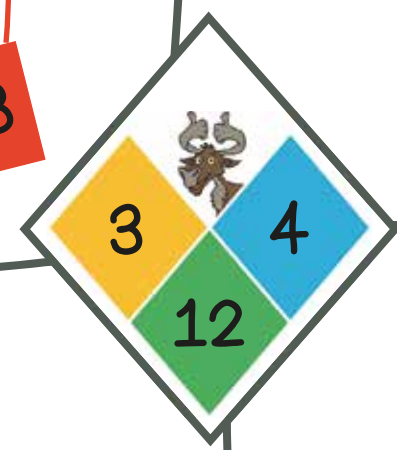
___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$3 = 12 \div \square$$

$$12 = 4 \times \square$$

$$\square \div 3 = 4$$

$$\square \times 3 = 12$$

There are three legs on **each** stool. If there are 4 stools, how many legs are there in **total**?

Each dinosaur has 3 horns. There are 12 horns in total. How many dinosaurs are there **altogether**?

There were three cats playing. How many cats' legs in **total**?

Bobby spent £12 on three books that each cost the same amount. How much were they **each**?



True or false?
One third of 12 is 4

Derive it

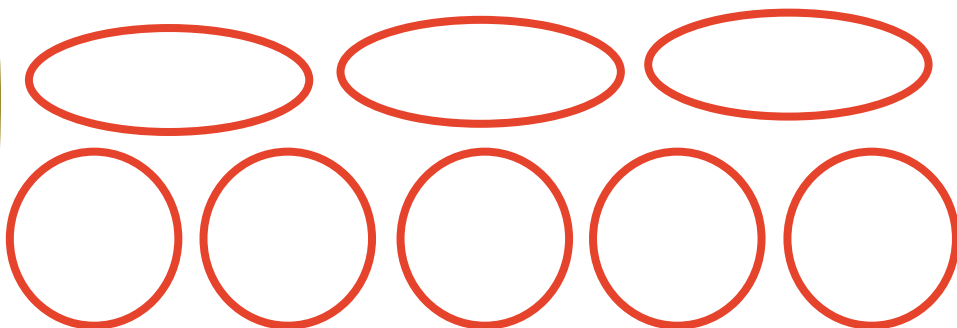
Deepen it

Draw it

bar



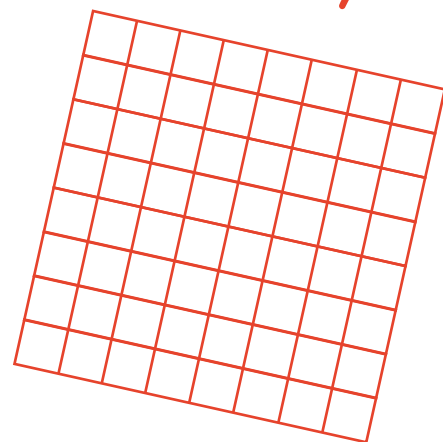
groups



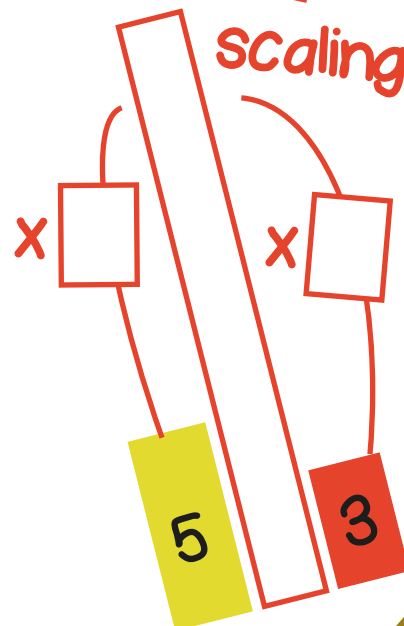
number line



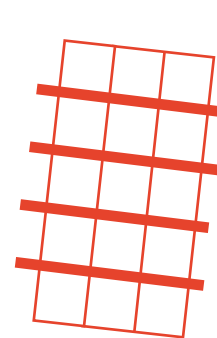
array



scaling

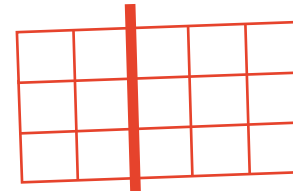


Dissect it



$$3 \times 5 = 3 + \square + 3 + \square + \square$$

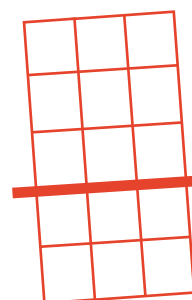
$$= \square$$



$$3 \times 5 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

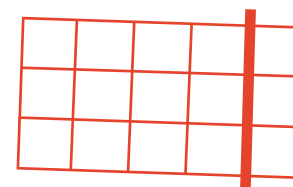
$$= \square$$



$$3 \times 5 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



$$3 \times 5 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 5 = 15$ then I also know...

$$\square \times \square = 15$$

$$15 = \square \times \square$$

$$15 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

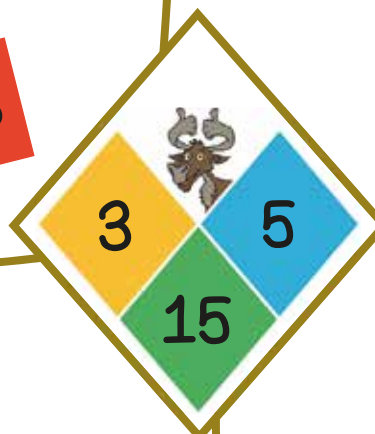
___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$3 = 15 \div \square$$

$$15 = 5 \times \square$$

$$\square \div 3 = 5$$

$$\square \times 3 = 15$$



$5 \div 15 = 3$
True or false?

Gill draws 5 triangles. How many sides has she drawn in **total**?

There are 15 footballers. They get into three equal teams. How many players are in **each** team?

A toy shop has five tricycles. How many wheels have they got **altogether**?

A gardener plants 15 bulbs so there are 3 in each pot. How many pots does he need in **total**?

Derive it

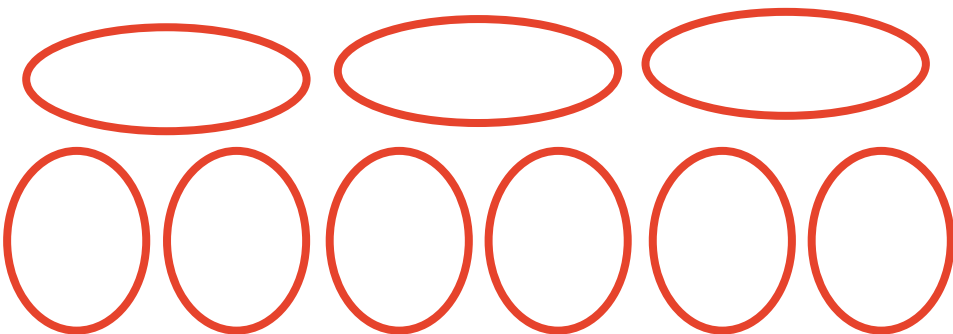
Deepen it

Draw it

bar



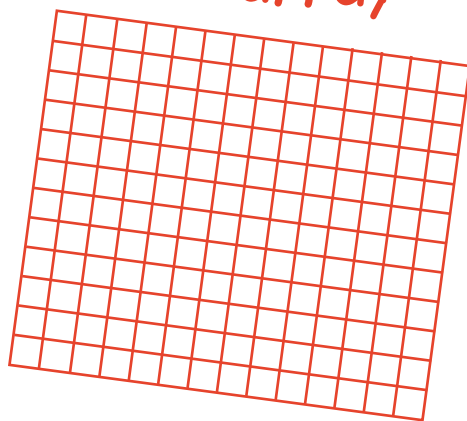
groups



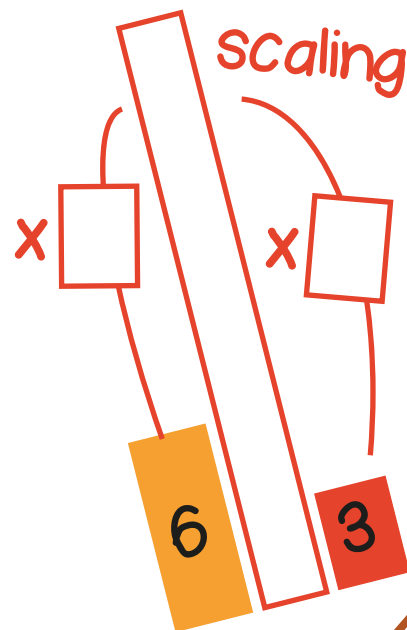
number line



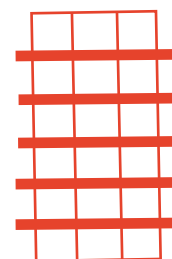
array



scaling

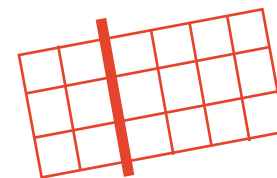


Dissect it



$$3 \times 6 = 3 + \square + 3 + \square + \square + \square$$

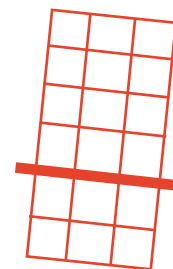
$$= \square$$



$$3 \times 6 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

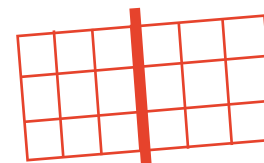
$$= \square$$



$$3 \times 6 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



$$3 \times 6 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 6 = 18$ then I also know...

$$\square \times \square = 18$$

$$18 = \square \times \square$$

$$18 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___

3

6

18

$$3 = 18 \div \square$$

$$18 = 6 \times \square$$

$$\frac{1}{3} \text{ of } \square = 6$$

$$\square \times 3 = 18$$



$6 \div 18 = 3$
True or false?

How many sides are there in **total** on three hexagons?

There are three beetles. If there are 18 beetles' legs, how many legs do they have **each**?

Harry saves £6 per week for three weeks. How much does he save **altogether**?

There are three DVDs in **each** box set. If there are 18 DVDs how many box sets can be made?

Derive it

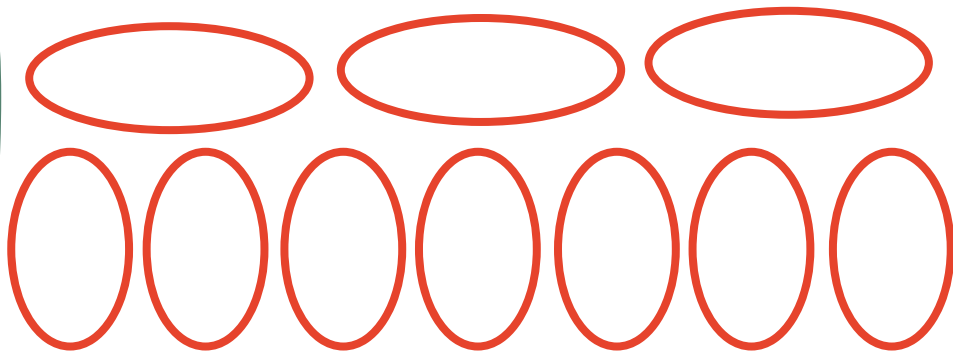
Deepen it

Draw it

bar



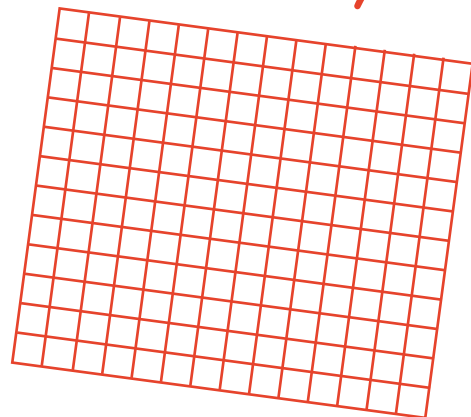
groups



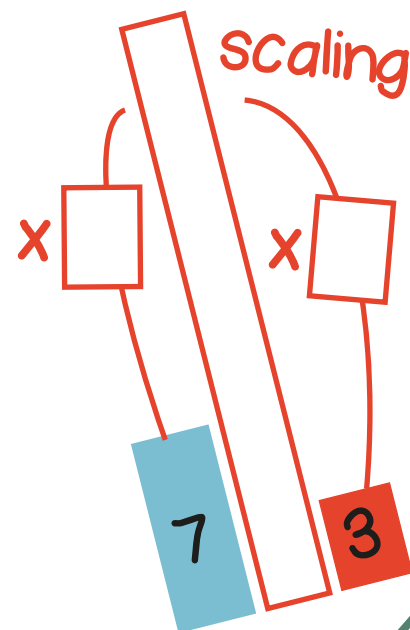
number line



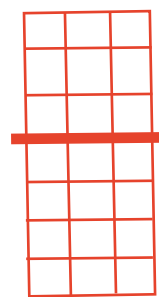
array



scaling



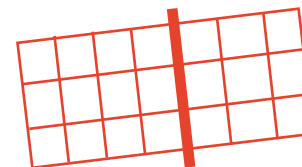
Dissect it



$$3 \times 7 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

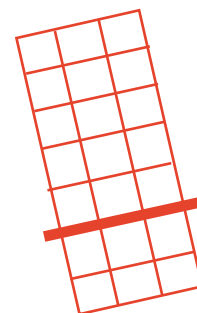
$$= \square$$



$$3 \times 7 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

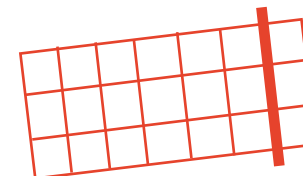
$$= \square$$



$$3 \times 7 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



$$3 \times 7 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 7 = 21$ then I also know...

$$\square \times \square = 21$$

$$21 = \square \times \square$$

$$21 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$3 = 21 \div \square$$

$$21 = \square \times 7$$

$$\frac{1}{3} \text{ of } \square = 7$$

$$\square \times 3 = 21$$



$3 \times 7 = 7 \times 3$
True or false?

Amy jogs 3km **each** day. How far does she jog in one week **in total**?

Sam draws some triangles. If he draws 21 sides **in total**, how many triangles has he drawn?

Ricky goes on holiday for three weeks. For how many days is he on holiday **in total**?

Three friends earn £21 gardening. If they each earn the same amount how much do they **each** earn?

Derive it

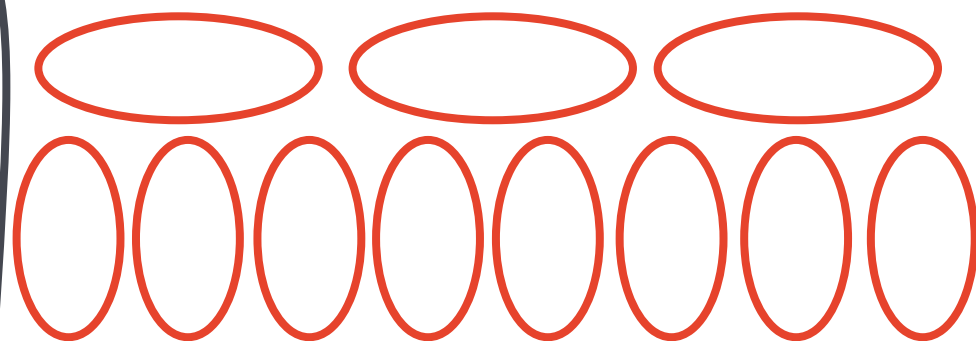
Deepen it

Draw it

bar



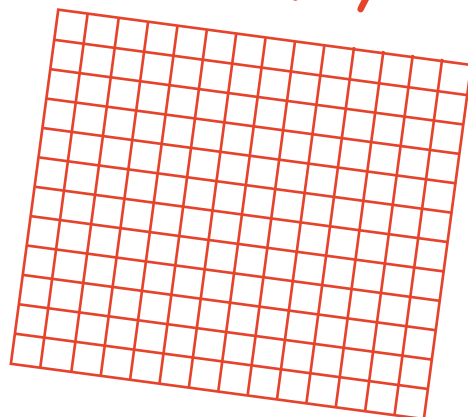
groups



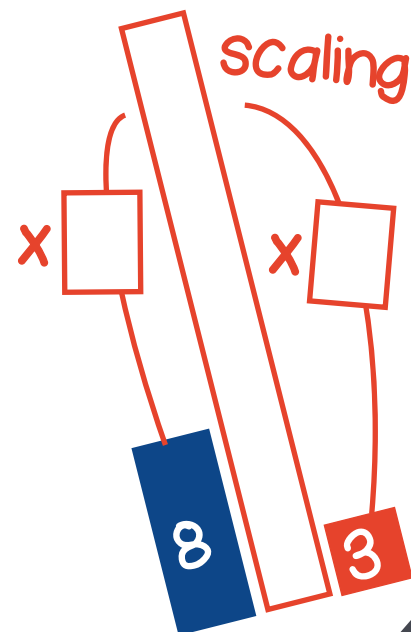
number line



array



scaling



Dissect it

$$3 \times 8 = 3 + \square + 3 + \square + \square$$

$$= \square$$

$$3 \times 8 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$

$$3 \times 8 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$

$$3 \times 8 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 8 = 24$ then I also know...

$$\square \times \square = 24$$

$$24 = \square \times \square$$

$$24 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___

$$3 = 24 \div \square$$

$$24 = 3 \times \square$$

$$\square \div 3 = 8$$

$$\square \times 3 = 24$$

How many sides are there on eight triangles **altogether**?

24 chairs are arranged in three equal rows. How many chairs are in **each** row?

A gardener plants 24 bulbs in 3 pots. There is an equal number in each pot. How many in **each** pot?

Carrots are sold in bags of 3kg. How many kilograms of carrots are in eight bags in **total**?



$8 \div 24 = 3$
True or false?

Derive it

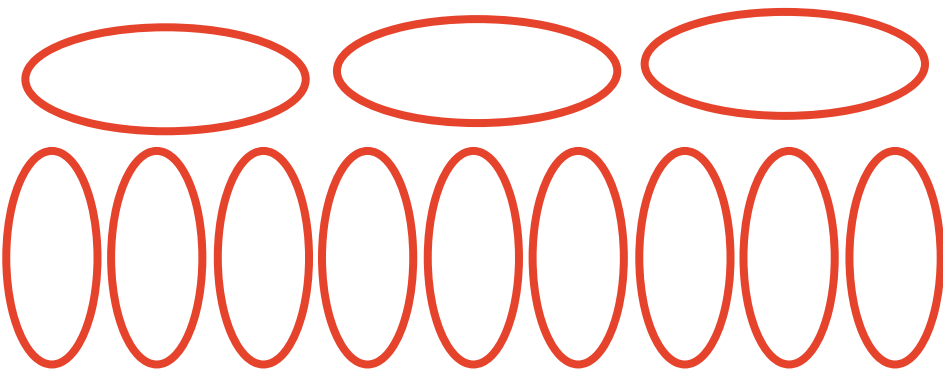
Deepen it

Draw it

bar



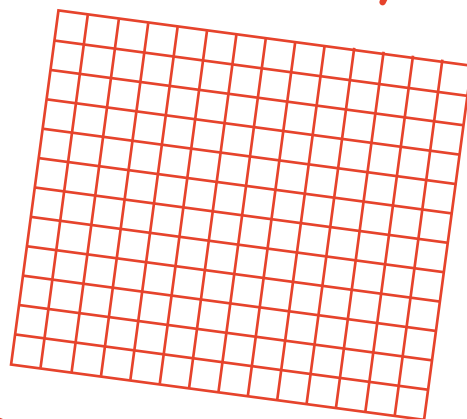
groups



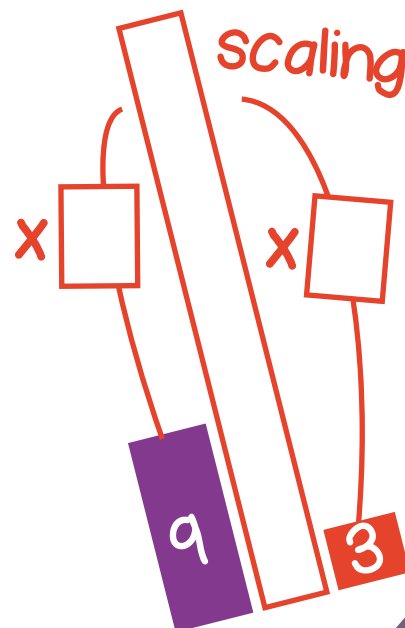
number line



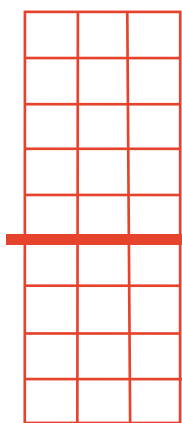
array



scaling



Dissect it



$$3 \times 9 = 3 \times \square + 3 \times \square$$

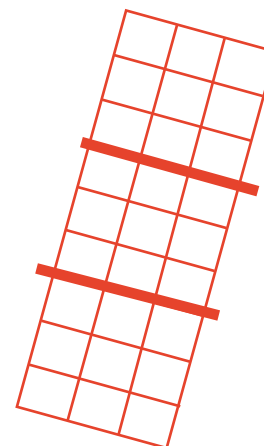
$$= \square + \square$$

$$= \square$$

$$3 \times 9 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



$$3 \times 9 = 3 \times \square + 3 \times \square + 3 \times \square$$

$$= \square + \square + \square$$

$$= \square$$

$$3 \times 9 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 9 = 27$ then I also know...

$$\square \times \square = 27$$

$$27 = \square \times \square$$

$$27 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$3 = 27 \div \square$$

$$27 = 9 \times \square$$

$$\square \div 3 = 9$$

$$\square \times 3 = 27$$



True or false?
One third of 9 is 27

Tessa spent a third of her savings on a book. The book cost £9. How much had she saved **in total**?

An amazing striker scores three goals in **each** of nine football matches. How many goals **in total**?

There are nine triangles. How many sides **altogether**?

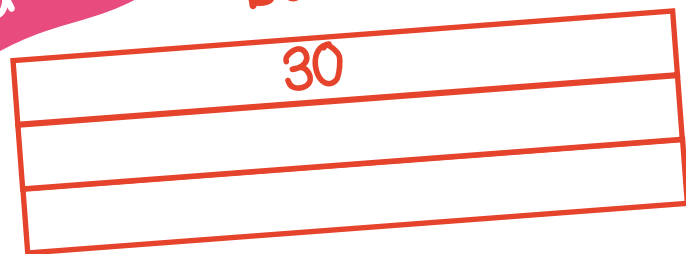
Parcels **each** weigh 3kg. If the **total** weight is 27kg how many parcels are there?

Derive it

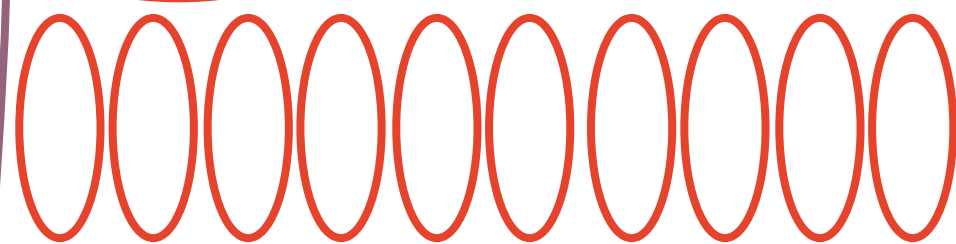
Deepen it

Draw it

bar



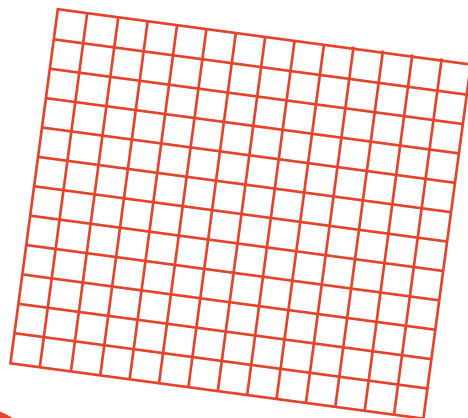
groups



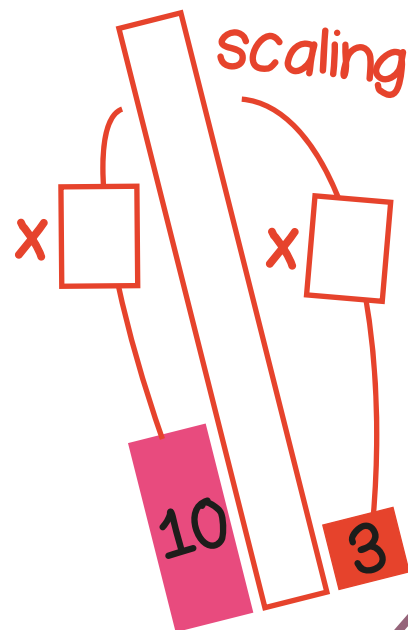
number line



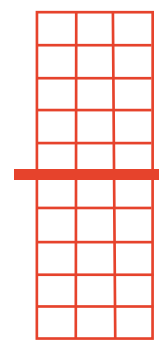
array



scaling



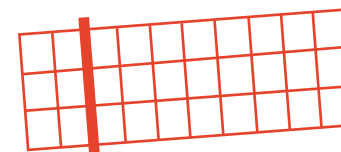
Dissect it



$$3 \times 10 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

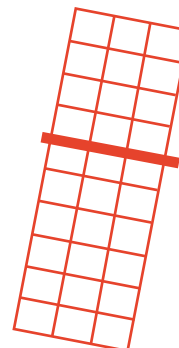
$$= \square$$



$$3 \times 10 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

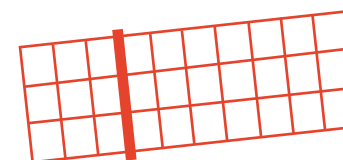
$$= \square$$



$$3 \times 10 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



$$3 \times 10 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 10 = 30$ then I also know...

$$\square \times \square = 30$$

$$30 = \square \times \square$$

$$30 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

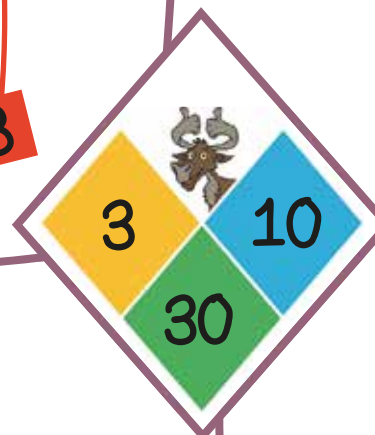
___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$3 = 30 \div \square$$

$$30 = 10 \times \square$$

$$\frac{1}{3} \text{ of } \square = 10$$

$$\square \times 3 = 30$$



$10 \div 30 = 3$
True or false?

How many sides are there in **total** on ten triangles?

Will's three dogs eat ten biscuits each. How many biscuits do they eat **in total**?

Katy has ten packs of pens. There are three pens in each pack. How many pens **altogether**?

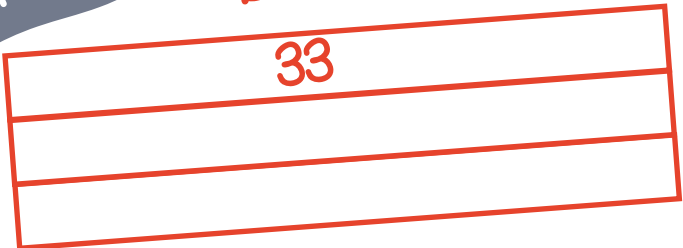
Doris buys ice creams for £3 **each**. She spends £30 in total. How many ice creams did she buy **altogether**?

Derive it

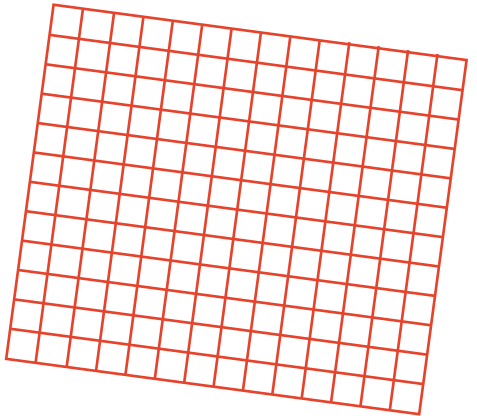
Deepen it

Draw it

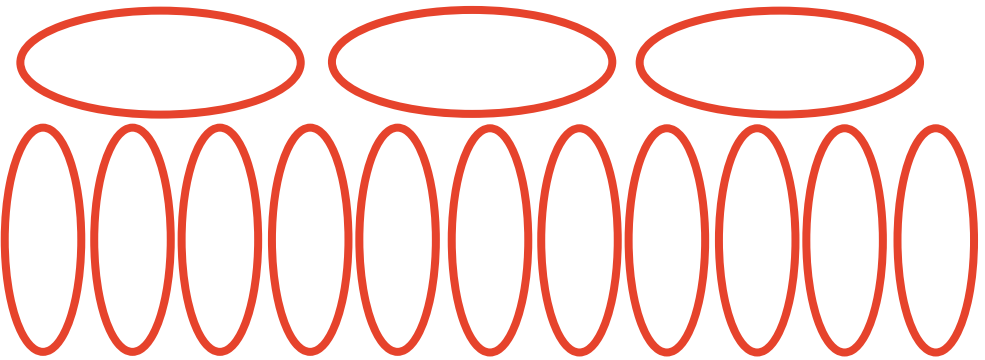
bar



array



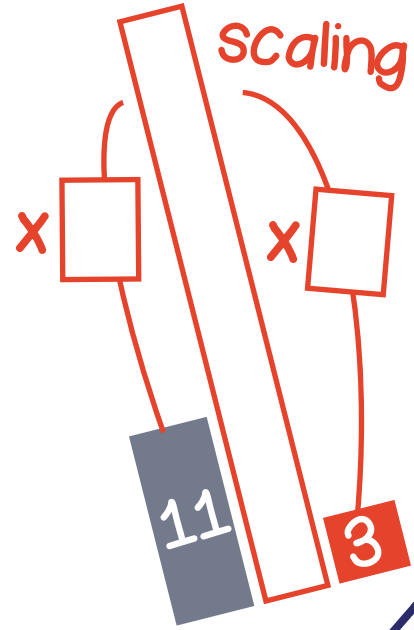
groups



number line



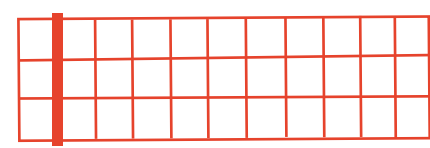
scaling



Dissect it

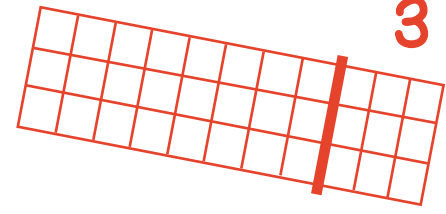
$$3 \times 11 = 3 \times \square + 3 \times \square$$
$$= \square + \square$$
$$= \square$$

$$3 \times 11 = 3 \times \square + 3 \times \square$$
$$= \square + \square$$
$$= \square$$



$$3 \times 11 = 3 \times \square + 3 \times \square$$
$$= \square + \square$$
$$= \square$$

$$3 \times 11 = 3 \times \square + 3 \times \square$$
$$= \square + \square$$
$$= \square$$



If I know $3 \times 11 = 33$ then I also know...

$$\square \times \square = 33$$

$$33 = \square \times \square$$

$$33 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

- __ multiplied by __ is __
- __ groups of __ is __
- __ shared equally between 3 is __ each
- __ put into groups of 3 is __ groups of 3
- __ and __ are factors of __
- __ is a multiple of __ and __



$$3 = \square \div 11$$

$$33 = \square \times 11$$

$$\frac{1}{3} \text{ of } \square = 11$$

$$\square \times 3 = 33$$

A budgie breeder keeps 33 budgies equally in three areas. How many budgies are in **each** area?

A football trainer has eleven nets with three balls in **each** net. How many balls are there **in total**?

Each bottle holds 3 litres of juice. How much juice is there **altogether** in eleven bottles?

If Chen spent £33 on cakes that cost £3 **each**, how many cakes did she buy?



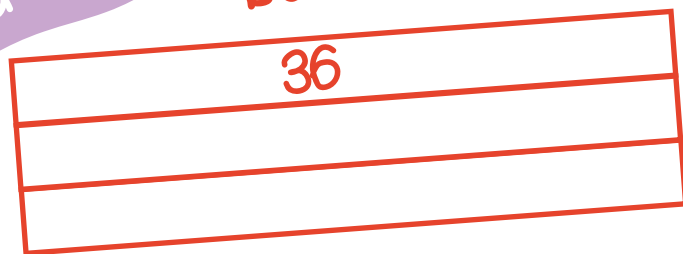
True or false?
 $3 \times 11 = 10 \times 3 + 3$

Derive it

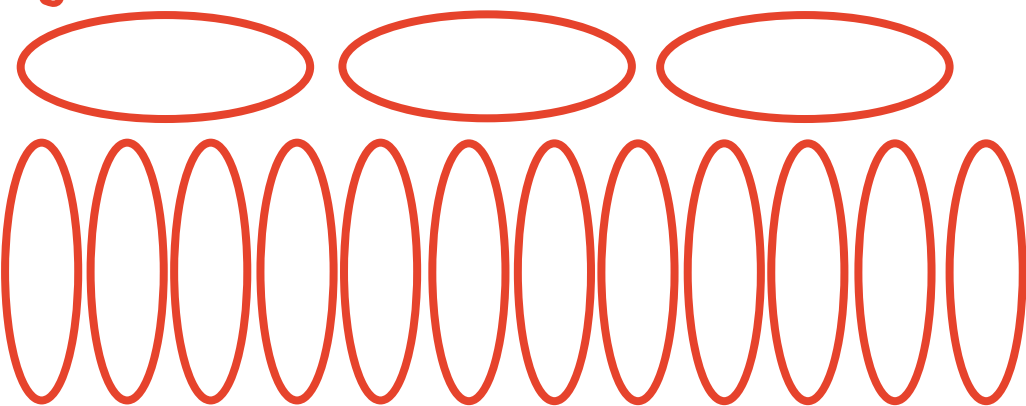
Deepen it

Draw it

bar



groups

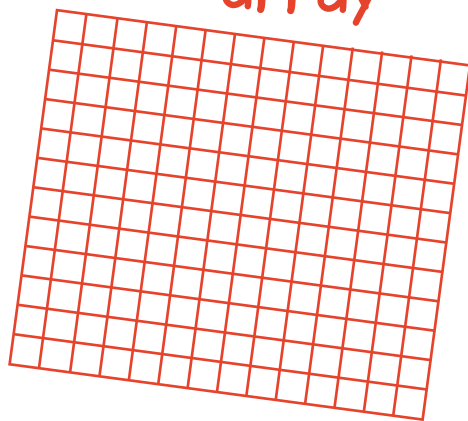


number line

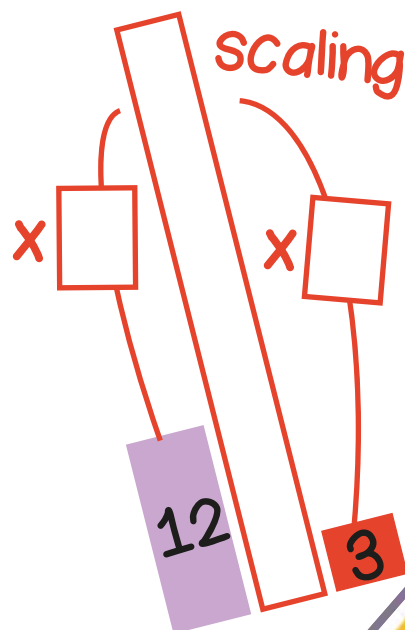
0

36

array



scaling



Dissect it

$$3 \times 12 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$

$$3 \times 12 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$

$$3 \times 12 = 3 \times \square + 3 \times \square + 3 \times \square$$

$$= \square + \square + \square$$

$$= \square$$

$$3 \times 12 = 3 \times \square + 3 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $3 \times 12 = 36$ then I also know...

$$\square \times \square = 36$$

$$36 = \square \times \square$$

$$36 = \square \times \square$$

$$\square \div \square = \square$$

$$\square = \square \div \square$$

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 3 is ___ each

___ put into groups of 3 is ___ groups of 3

___ and ___ are factors of ___

___ is a multiple of ___ and ___

3

12

36

$$3 = \square \div 12$$

$$36 = \square \times 12$$

$$\frac{1}{3} \text{ of } \square = 12$$

$$\square \times 3 = 36$$

Each box holds a dozen eggs. How many eggs are there in 3 boxes?

Three minibuses carry 36 people equally. How many people are there in **each** minibus?

A shopkeeper packs 36kg of potatoes into 3kg bags. How many bags can he fill **in total**?

Each piece of ribbon is 3m long. How long will 12 pieces of ribbon be **altogether**?



True or false?
 3×12 is double 3×6

Derive it

Deepen it