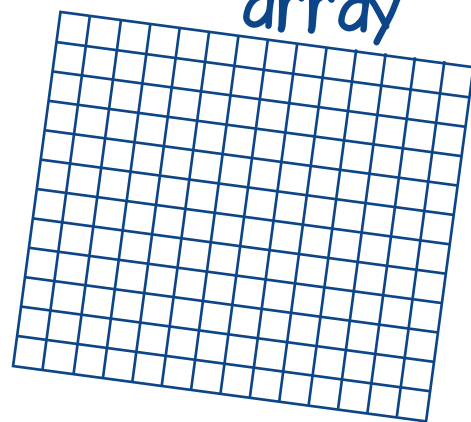


Draw it

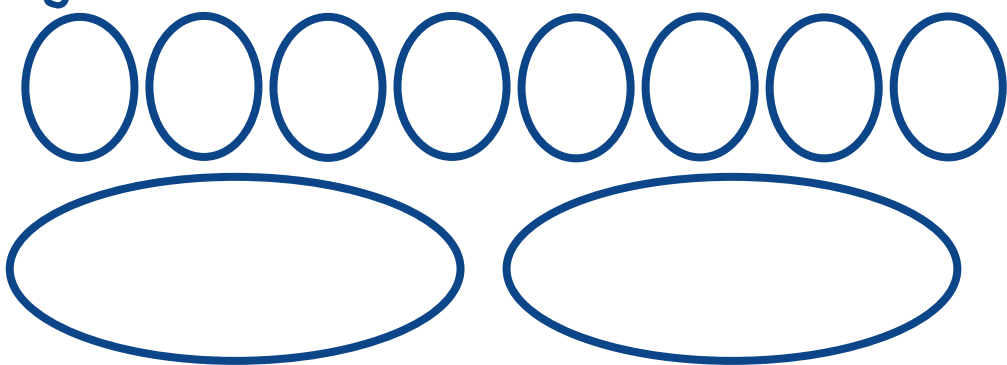
bar



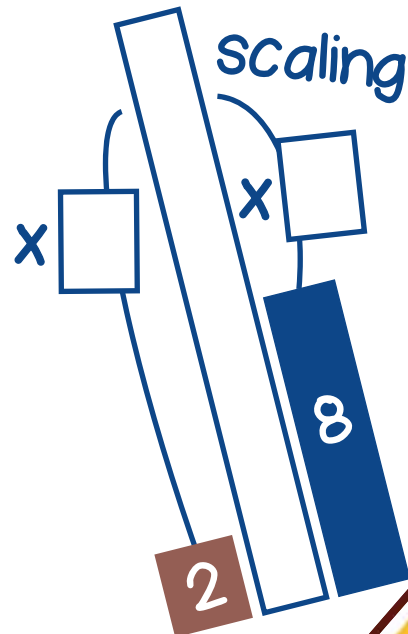
array



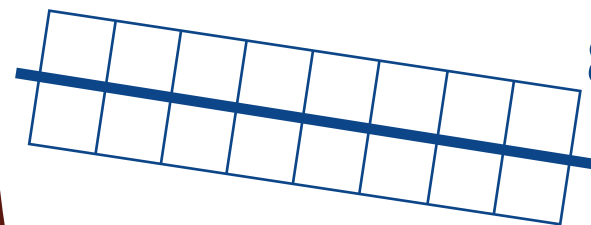
groups



number line

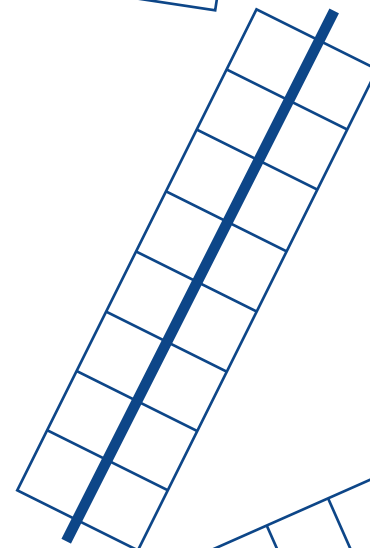


Dissect it



$$8 \times 2 = 8 + \square$$

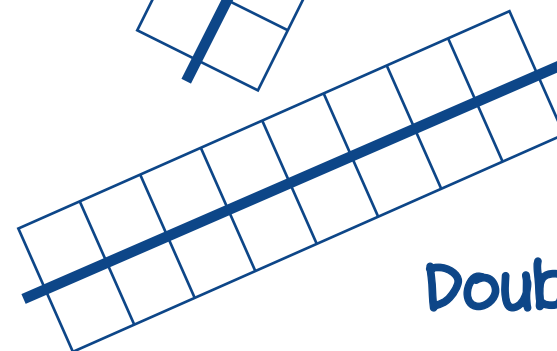
$$= \square$$



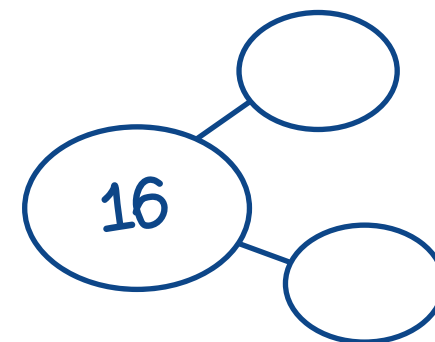
$$8 \times 2 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



$$\text{Double } 8 = \square$$



If I know $8 \times 2 = 16$ then I also know...

$$\square \times \square = 16$$

$$16 = \square \times \square$$

$$16 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 2$$

$$16 = \square \times 2$$

$$\frac{1}{8} \text{ of } \square = 2$$

$$\square \times 8 = 16$$



True or false?
Half of 8 = 16

Billy took 8 minutes to jog a mile. Len took twice as long. How long did Len take to jog a mile?

Quin gave half of his cars to Carl. He gave Carl 8 cars. How many cars did Quin have at first?

One octopus has 8 tentacles. How many tentacles do two octopuses have?

16 children line up in eights. How many lines of children are there?

Derive it

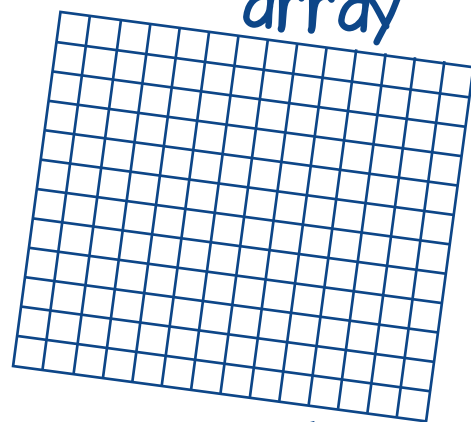
Deepen it

Draw it

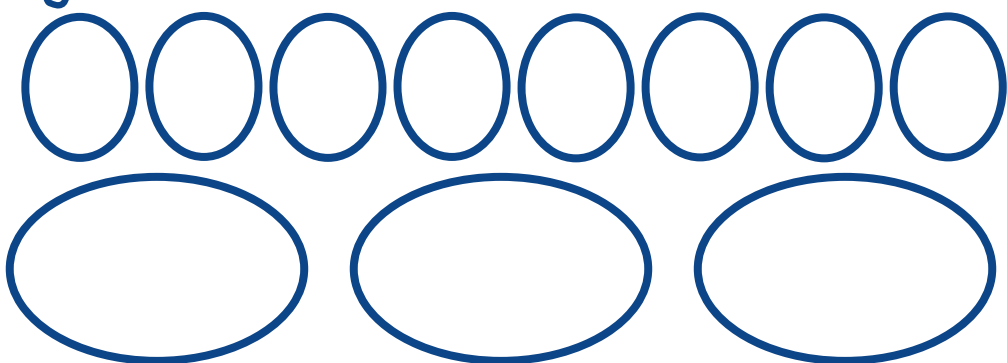
bar



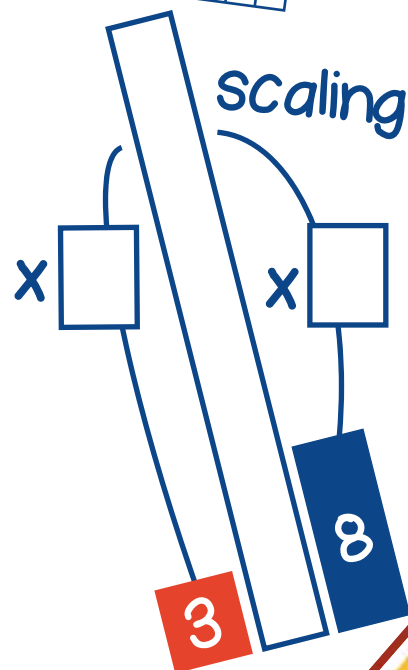
array



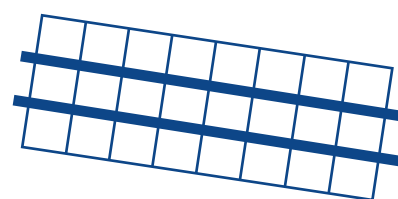
groups



number line

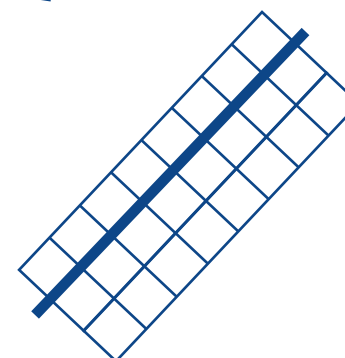


Dissect it



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

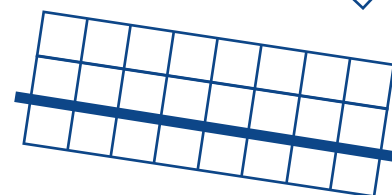
$$= \square$$



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

$$= \square + \square$$

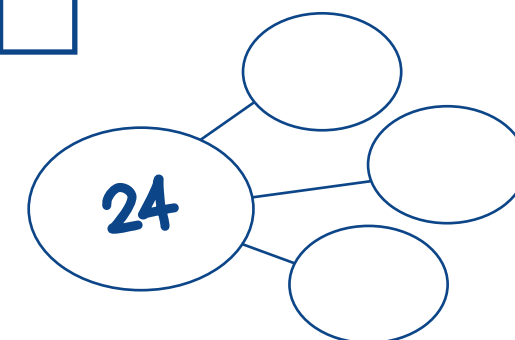
$$= \square$$



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

$$= \square + \square$$

$$= \square$$



If I know $8 \times 3 = 24$ 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 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 3$$

$$24 = \square \times 3$$

$$\frac{1}{8} \text{ of } \square = 3$$

$$\square \times 8 = 24$$



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

Rory jogged for 8 minutes on three days last week. For how long did he jog **altogether**?

A chef uses a third of a sack of potatoes. He uses 8kg. What did the sack hold to start with?

Ian spends £24 on three T shirts. If they cost the same amount each, how much do they **each** cost?

Phil draws 24 sides to make eight shapes the same. What shapes did he draw?

Derive it

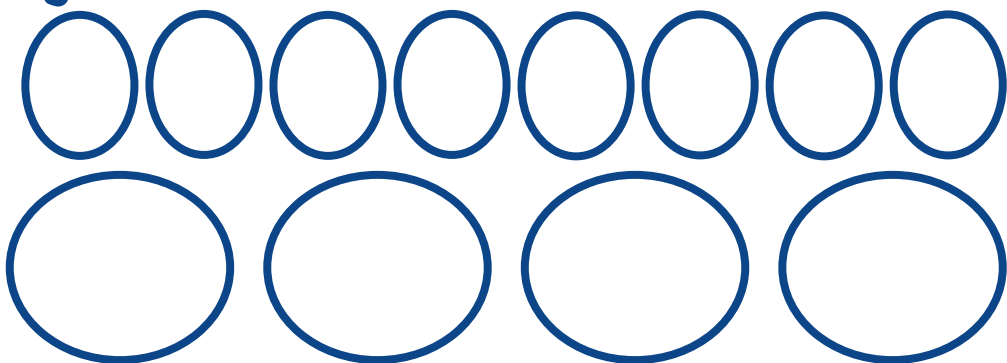
Deepen it

Draw it

bar



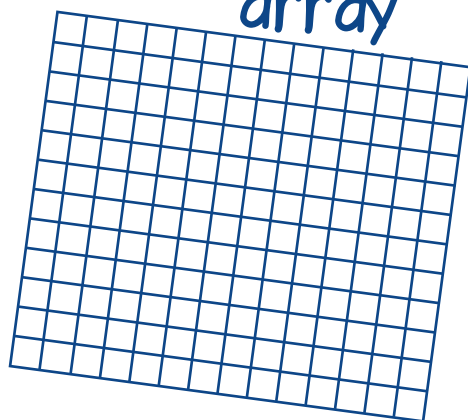
groups



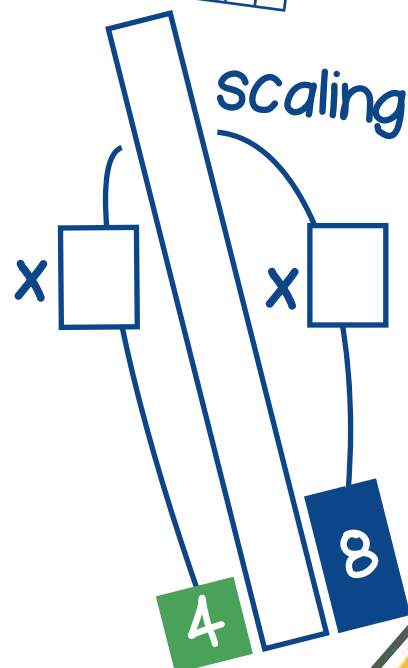
number line



array



scaling



Dissect it

$$8 \times 4 = 8 + \square + 8 + \square = \square$$

$$8 \times 4 = 8 \times \square + 8 \times \square = \square + \square = \square$$

$$8 \times 4 = 8 \times \square + 8 \times \square = \square + \square = \square$$

$$8 \times 4 = 8 \times \square + 8 \times \square = \square + \square = \square$$



If I know $8 \times 4 = 32$ then I also know...

$$\square \times \square = 32$$

$$32 = \square \times \square$$

$$32 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___

$$8 = \square \div 4$$

$$32 = \square \times 4$$

$$\frac{1}{8} \text{ of } \square = 4$$

$$\square \times 8 = 32$$



True or false?
 $32 \div 8 = 4$

Lyn spent a quarter of her money on music. She spent £8. How much money did she have at first?

Pens are sold in packs of 8. Fran buys 32 pens. How many packs does she buy?

A rugby team score 8 tries in each match. They play 4 matches. How many tries do they score?

The total length of all the sides of an octagon is 32cm. The sides are equal. How long is each side?

Derive it

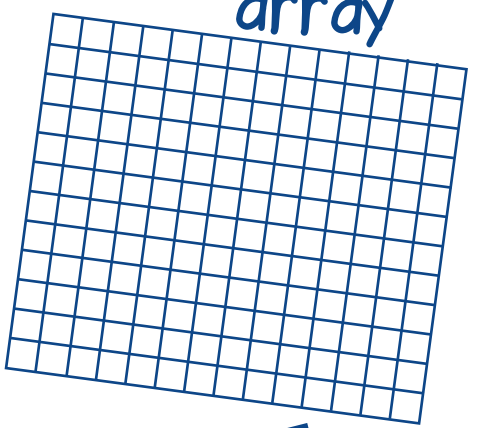
Deepen it

Draw it

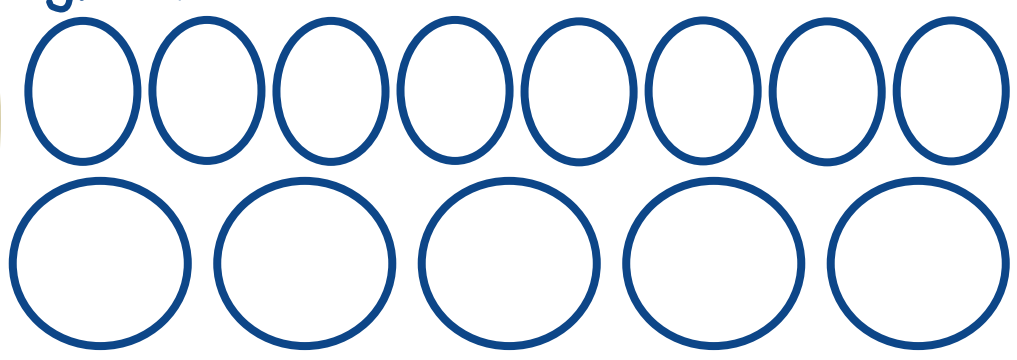
bar



array



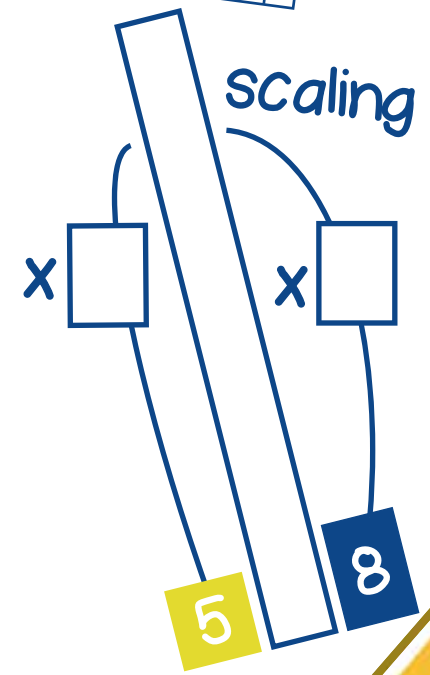
groups



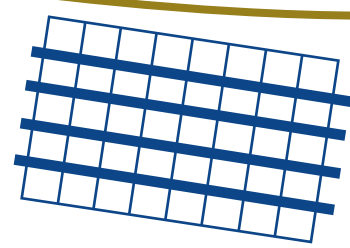
number line



scaling

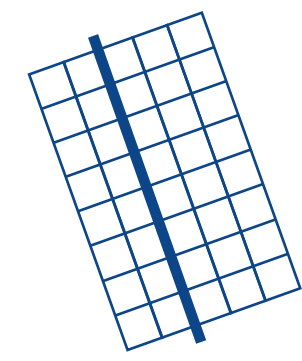


Dissect it



$$8 \times 5 = 8 + \square + 8 + \square + \square$$

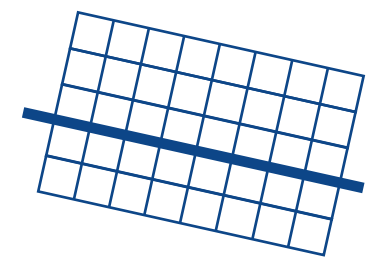
$$= \square$$



$$8 \times 5 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

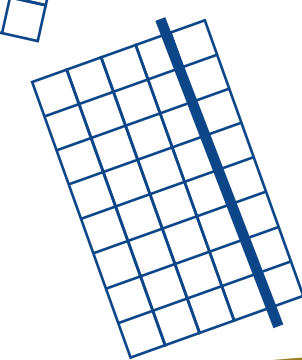
$$= \square$$



$$8 \times 5 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



$$8 \times 5 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $8 \times 5 = 40$ then I also know...

$$\square \times \square = 40$$

$$40 = \square \times \square$$

$$40 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 5$$

$$40 = \square \times 5$$

$$\frac{1}{8} \text{ of } \square = 5$$

$$\square \times 8 = 40$$



True or false?
 $8 \times 5 = 4 \times 10$

Some girls wash cars and earn £40. They get £8 **each**. How many girls were there?

How many sides are there on five octagons **in total**?

40kg of potatoes are put into 8 bags. If there is the same weight in each bag what does each bag weigh?

Each side of a pentagon is 8cm. What is the total length of all the sides?

Derive it

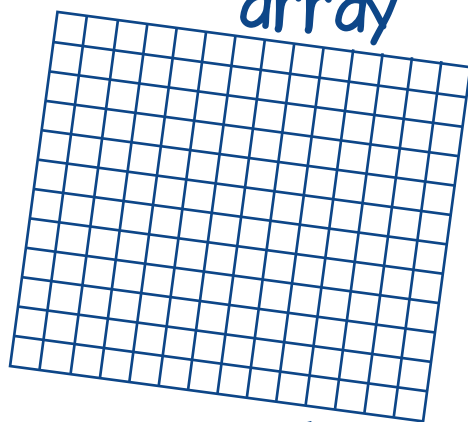
Deepen it

Draw it

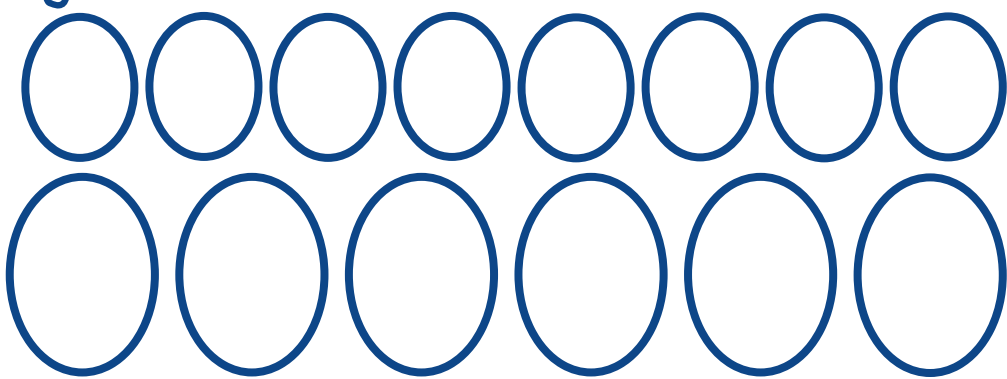
bar



array



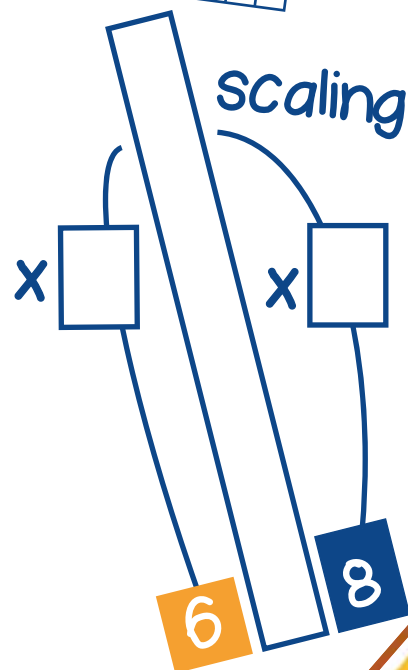
groups



number line



scaling



Dissect it

$$8 \times 6 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$

$$8 \times 6 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$

$$8 \times 6 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$

$$8 \times 6 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $8 \times 6 = 48$ then I also know...

$$\square \times \square = 48$$

$$48 = \square \times \square$$

$$48 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 6$$

$$48 = \square \times 6$$

$$\frac{1}{8} \text{ of } \square = 6$$

$$\square \times 8 = 48$$

Each egg box holds half a dozen eggs. How many eggs are in eight full egg boxes **altogether**?

George builds a Lego wall 8 bricks high. Each layer has 6 bricks in it. How many bricks are in the wall?

48 litres of water is divided equally between 8 buckets. How much water is in **each** bucket?

Ali bought T shirts that were £8 each. He spent £48. How many T shirts did he buy?



True or false?
 $8 \times 6 = \text{double } 3 \times 8$

Derive it

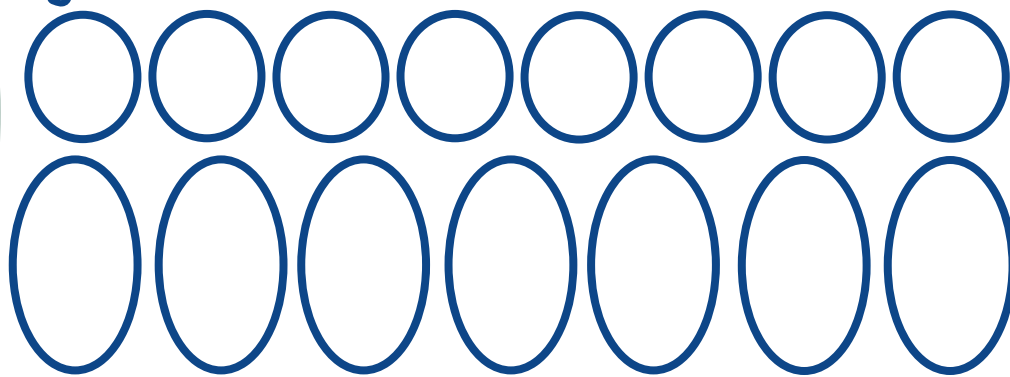
Deepen it

Draw it

bar



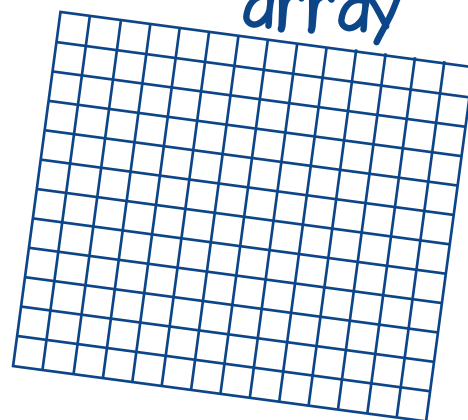
groups



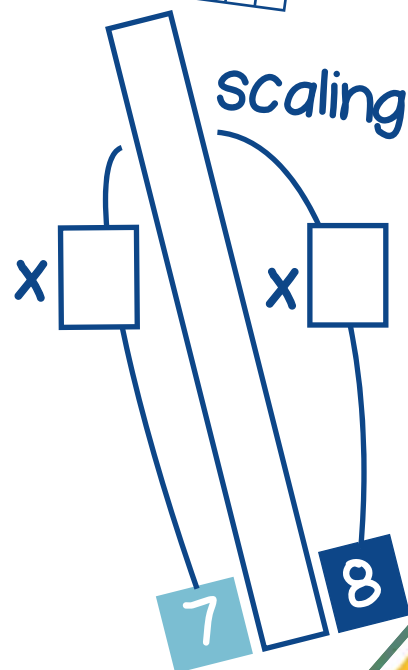
number line



array



scaling

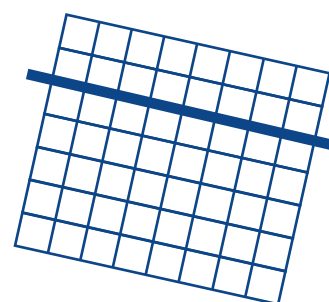


Dissect it

$$8 \times 7 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

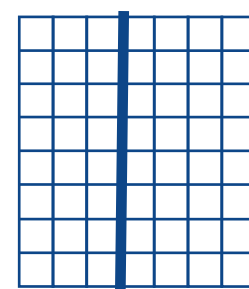
$$= \square$$



$$8 \times 7 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

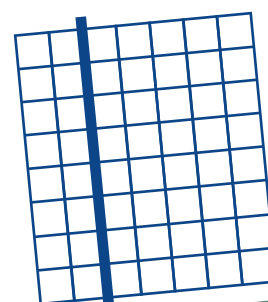
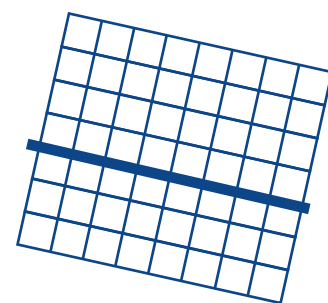
$$= \square$$



$$8 \times 7 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



$$8 \times 7 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $8 \times 7 = 56$ then I also know...

$$\square \times \square = 56$$

$$56 = \square \times \square$$

$$56 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 7$$

$$56 = \square \times 7$$

$$\frac{1}{8} \text{ of } \square = 7$$

$$\square \times 8 = 56$$



True or false?

$$8 \times 7 = 5 \times 7 + 2 \times 7$$

Sasha spends £56 on books that cost £8 each. How many books did she buy?

Hannah jogs 8km each day. How far does she jog in a week **in total**?

Each flower has eight petals. There are seven flowers. How many petals are there **altogether**?

Brenda bakes 56 cup cakes for a sale. She arranges them in eight equal rows. How many in **each** row?

Derive it

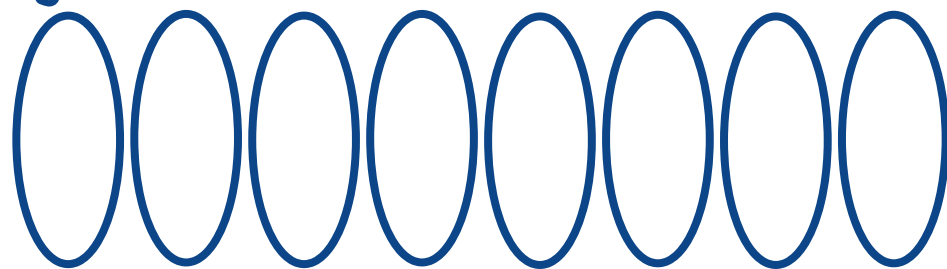
Deepen it

Draw it

bar



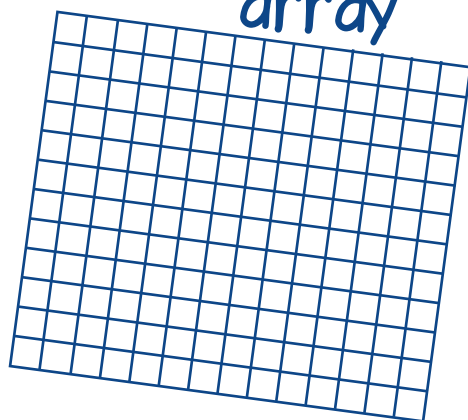
groups



number line



array



scaling



Dissect it

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

$$= \square + \square$$

$$= \square$$

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

$$= \square + \square$$

$$= \square$$

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

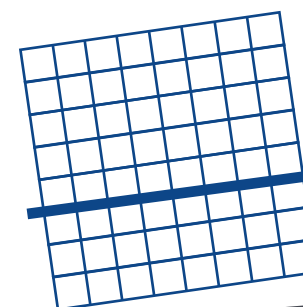
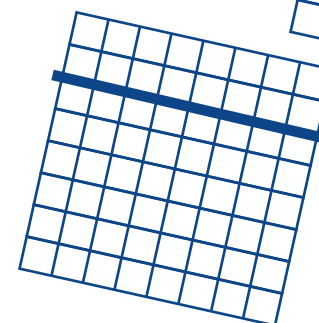
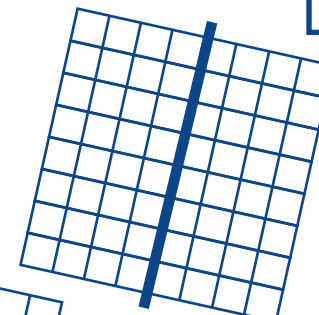
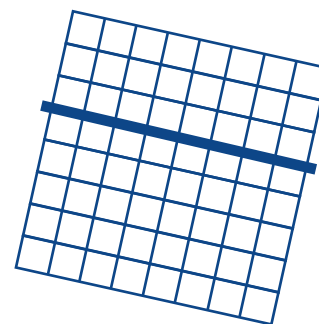
$$= \square + \square$$

$$= \square$$

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

$$= \square + \square$$

$$= \square$$



If I know $8 \times 8 = 64$ then I also know...

$$\square \times \square = 64$$

$$64 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 8$$

$$64 = \square \times 8$$

$$\frac{1}{8} \text{ of } \square = 8$$

$$\square \times 8 = 64$$



$8 \div 8 = 64$
True or false?

A chess board has a total of 64 squares in eight rows. How many squares are in **each** row?

How many sides do 8 octagons have **altogether**?

64 scouts go camping. **Each** tent can sleep 8 scouts. How many tents do they need?

Harry buys eight books at £8 each. How much do the books cost **in total**?

Derive it

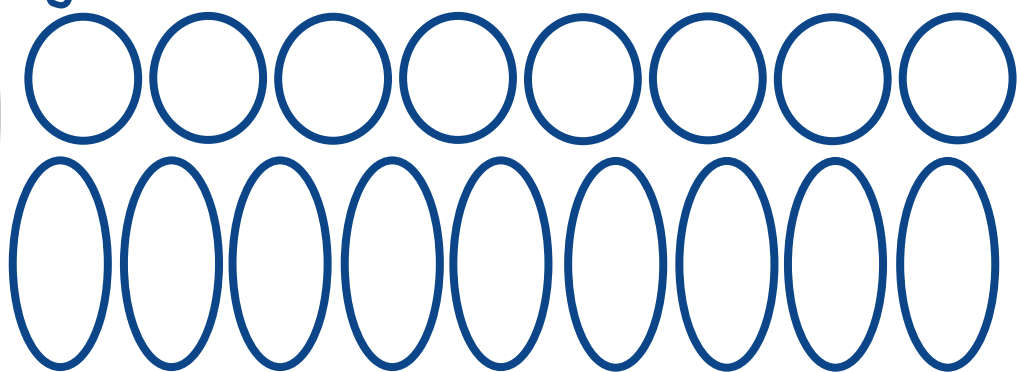
Deepen it

Draw it

bar



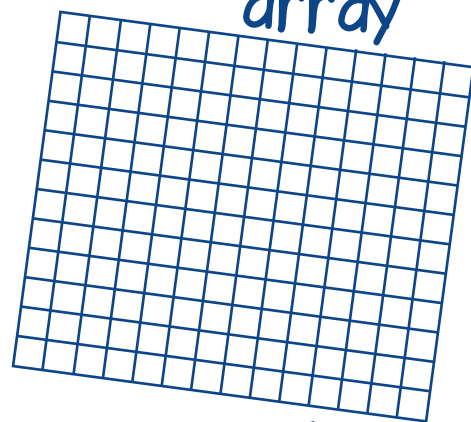
groups



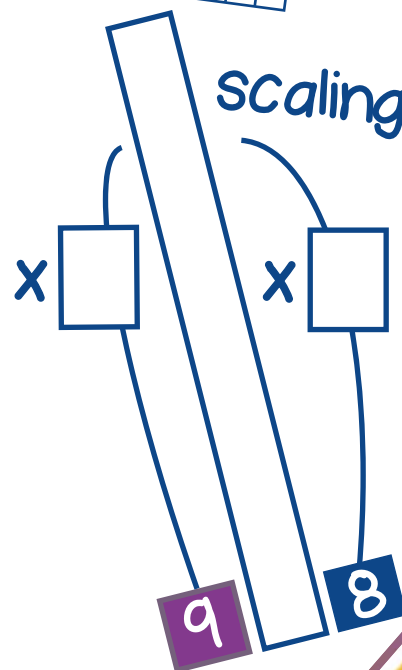
number line



array



scaling

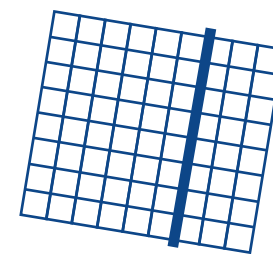
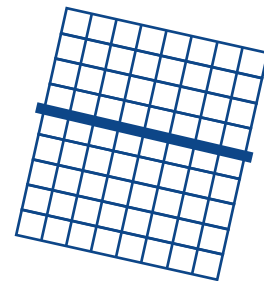


Dissect it

$$8 \times 9 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



$$8 \times 9 = 8 \times \square + 8 \times \square$$

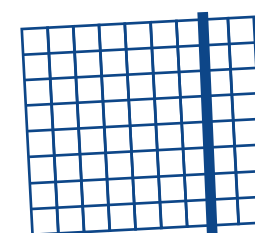
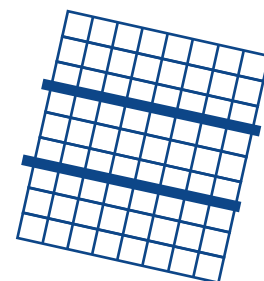
$$= \square + \square$$

$$= \square$$

$$8 \times 9 = 8 \times \square + 8 \times \square + 8 \times \square$$

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

$$= \square$$



$$8 \times 9 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $8 \times 9 = 72$ then I also know...

$$\square \times \square = 72$$

$$72 = \square \times \square$$

$$72 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 9$$

$$72 = \square \times 9$$

$$\frac{1}{8} \text{ of } \square = 9$$

$$\square \times 8 = 72$$



$72 \div 9 = 8$
True or false?

There are nine bags of dog food, each weighing 8kg. What is the **total** weight of the dog food?

Each tin of paint can cover 8m^2 of wall. How many tins of paint will be needed to cover 72m^2 ?

If one octopus has 8 tentacles how many tentacles would nine octopuses have **in total**?

At the cinema 72 people sit equally in 8 rows. How many people sit in **each** row?

Derive it

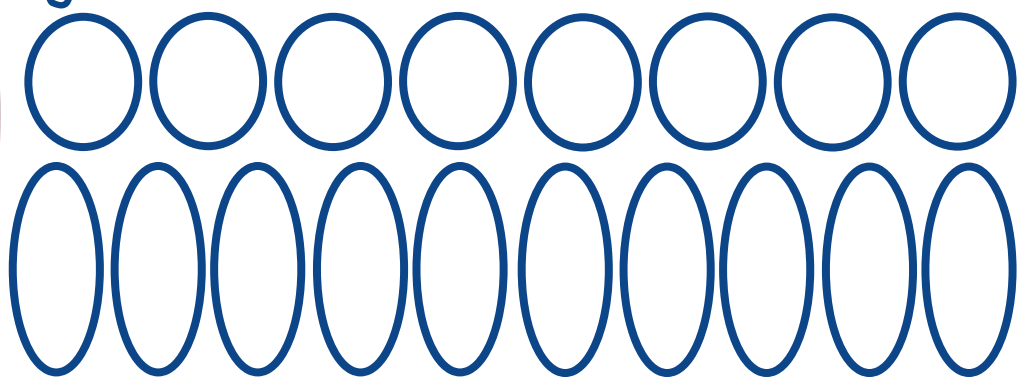
Deepen it

Draw it

bar



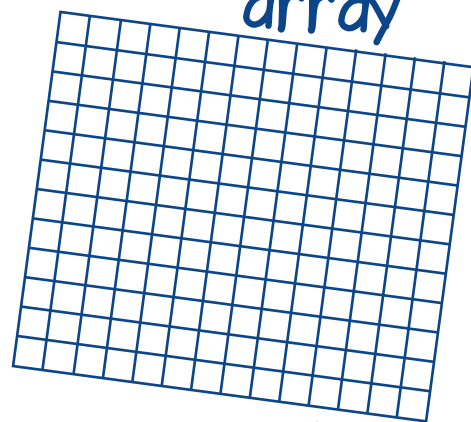
groups



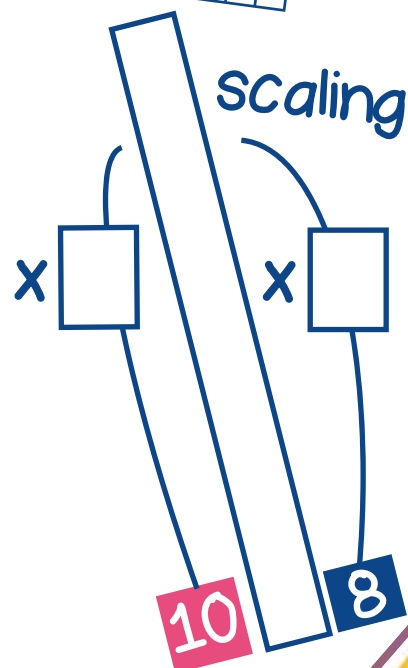
number line



array



scaling

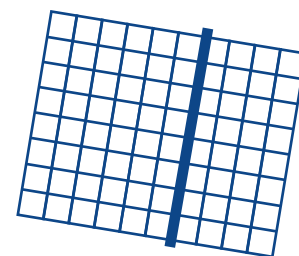
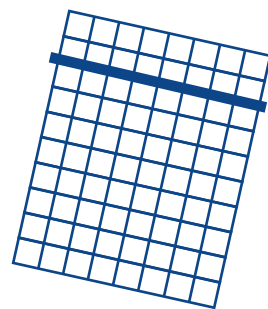


Dissect it

$$8 \times 10 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

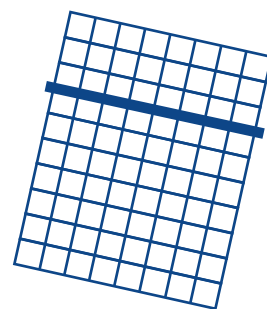
$$= \square$$



$$8 \times 10 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

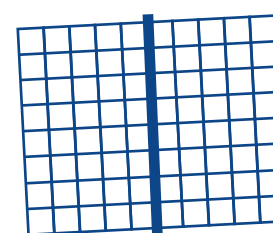
$$= \square$$



$$8 \times 10 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



$$8 \times 10 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $8 \times 10 = 80$ then I also know...

$$\square \times \square = 80$$

$$80 = \square \times \square$$

$$80 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 10$$

$$80 = \square \times 10$$

$$\frac{1}{8} \text{ of } \square = 10$$

$$\square \times 8 = 80$$



$80 \div 10 = 8$
True or false?

80 spectators sit equally in 8 rows.
How many spectators in **each** row?

Each adult dog has 8 puppies. If there are ten adult dogs, how many puppies in **total**?

Rob draws ten octagons. How many sides does he draw **altogether**?

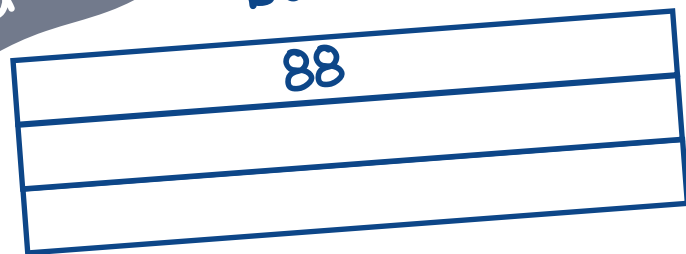
A sports coach stores balls in bags of 8. He has 80 balls. How many bags does he need **altogether**?

Derive it

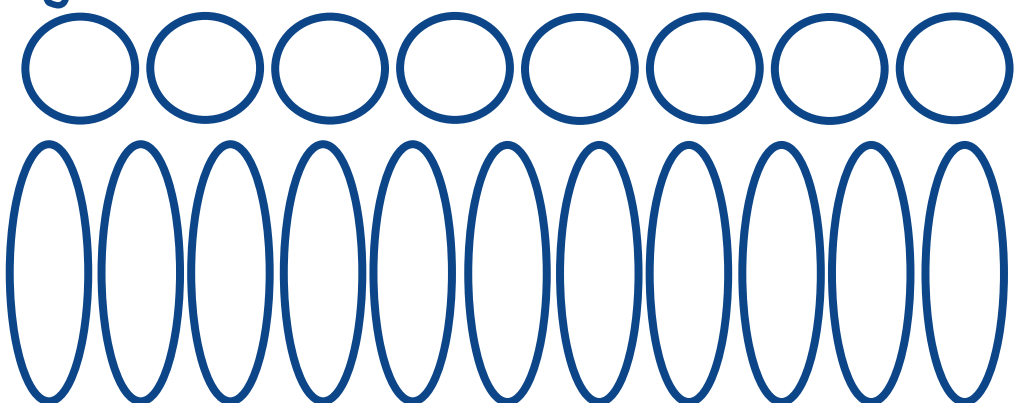
Deepen it

Draw it

bar



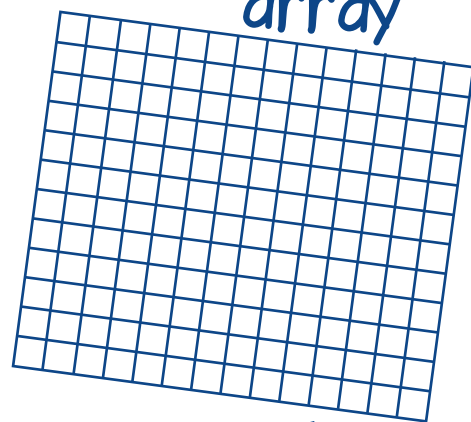
groups



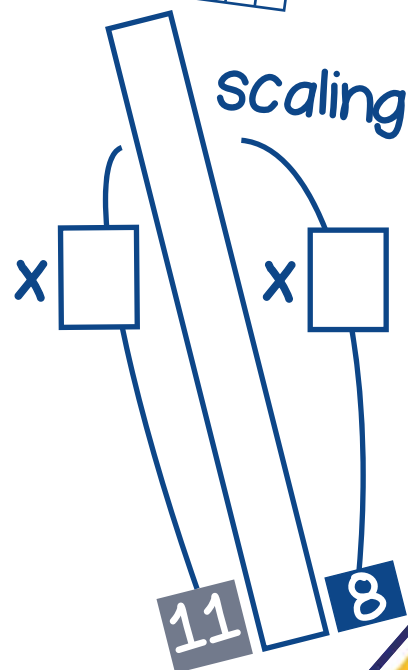
number line



array



scaling

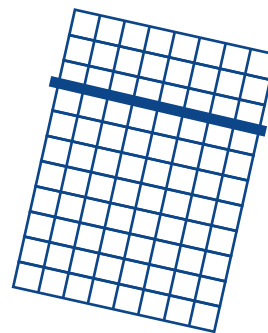


Dissect it

$$8 \times 11 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

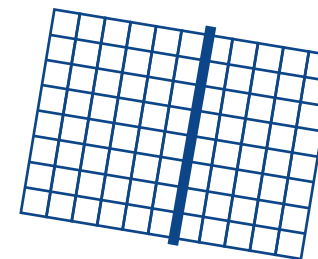
$$= \square$$



$$8 \times 11 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

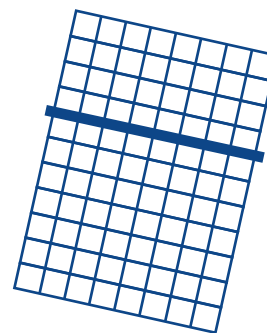
$$= \square$$



$$8 \times 11 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

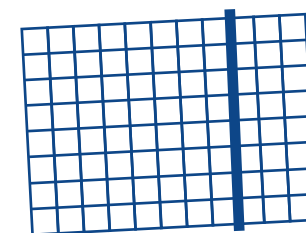
$$= \square$$



$$8 \times 11 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $8 \times 11 = 88$ then I also know...

$$\square \times \square = 88$$

$$88 = \square \times \square$$

$$88 = \square \times \square$$

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

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

___ multiplied by ___ is ___

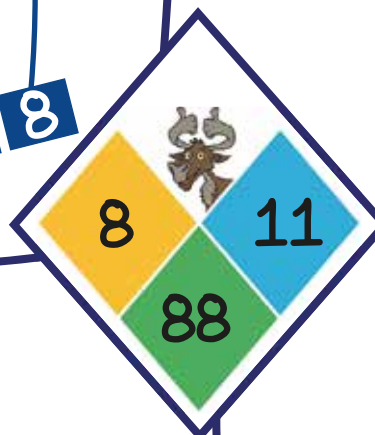
___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 11$$

$$88 = \square \times 11$$

$$\frac{1}{8} \text{ of } \square = 11$$

$$\square \times 8 = 88$$



$11 \div 88 = 8$
True or false?

There are 11 footballers in **each** team. How many footballers are there in 8 teams?

Each vase has 8 tulips in it. How many tulips are there in 11 vases?

Amy spends £88 on 8 books. If **each** book costs the same, how much does a book cost?

A horse eats 8kg of hay **each** day. For how many days will 88kg of hay last?

Derive it

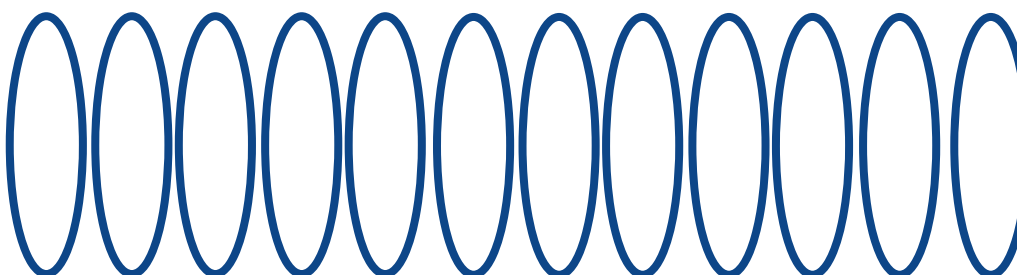
Deepen it

Draw it

bar



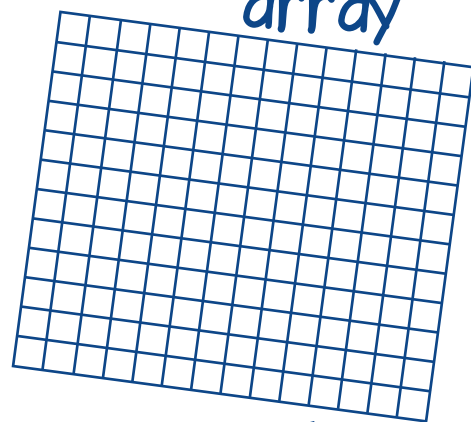
groups



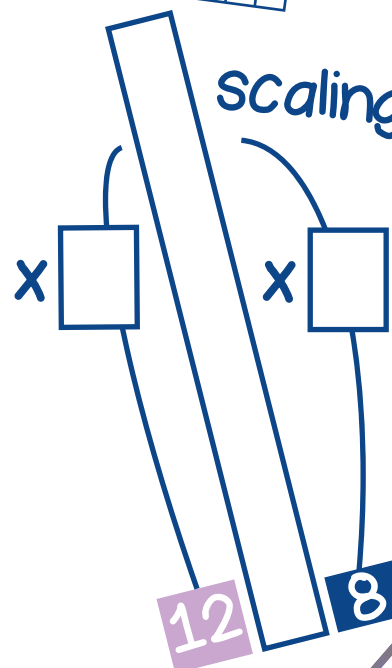
number line



array



scaling



Dissect it

$$8 \times 12 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$

$$8 \times 12 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$

$$8 \times 12 = 8 \times \square + 8 \times \square + 8 \times \square$$

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

$$= \square$$

$$8 \times 12 = 8 \times \square + 8 \times \square$$

$$= \square + \square$$

$$= \square$$



If I know $8 \times 12 = 96$ then I also know...

$$\square \times \square = 96$$

$$96 = \square \times \square$$

$$96 = \square \times \square$$

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

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

___ multiplied by ___ is ___

___ groups of ___ is ___

___ shared equally between 8 is ___ each

___ put into groups of 8 is ___ groups of 8

___ and ___ are factors of ___

___ is a multiple of ___ and ___



$$8 = \square \div 12$$

$$96 = \square \times 12$$

$$\frac{1}{8} \text{ of } \square = 12$$

$$\square \times 8 = 96$$

Each box holds a dozen pens. How many pens are there in 8 boxes?

Eight minibuses carry 96 people equally. How many people are there in **each** minibus?

A farmer puts eight pigs in **each** sty. If he has 96 pigs, how many pigsties does he use?

There are 8 pints in a gallon. How many pints are there in 12 gallons?



True or false?
 8×12 is double 4×6

Derive it

Deepen it