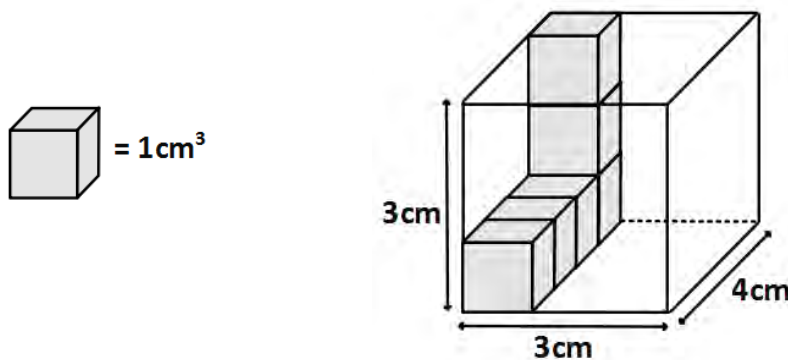


Volume Problem 1

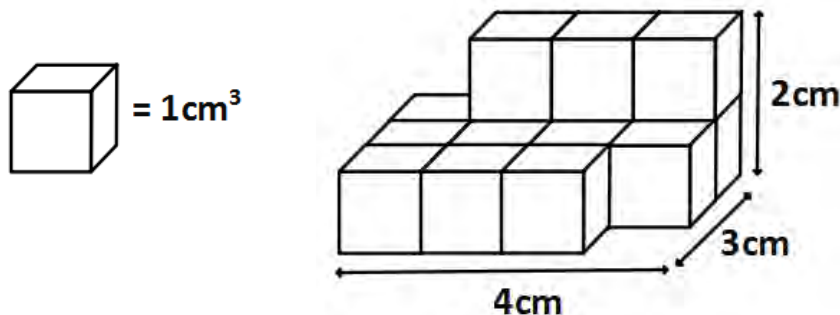
How many more **centimetre cubes** will it take to **fill** this box?



LO: Recognise when it is possible to use formulae for area and volume of shapes

Volume Problem 2

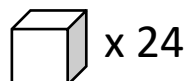
How many more **centimetre cubes** are required to make a **cuboid** with the dimensions **4cm x 3cm x 2cm**?



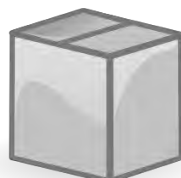
LO: Recognise when it is possible to use formulae for area and volume of shapes

Volume Problem 3

Ben has **24** centimetre cubes?



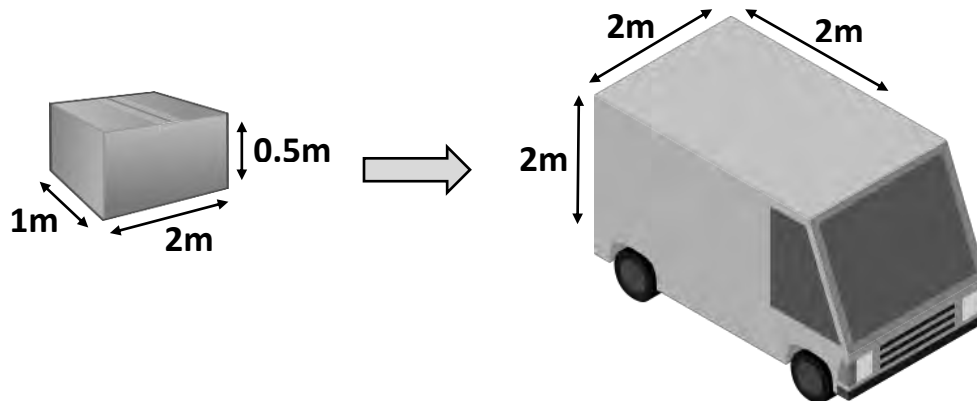
He wants to make a box that will hold the **24** cubes **perfectly** (no gaps)



What **dimensions** could the box have?

Volume Problem 4

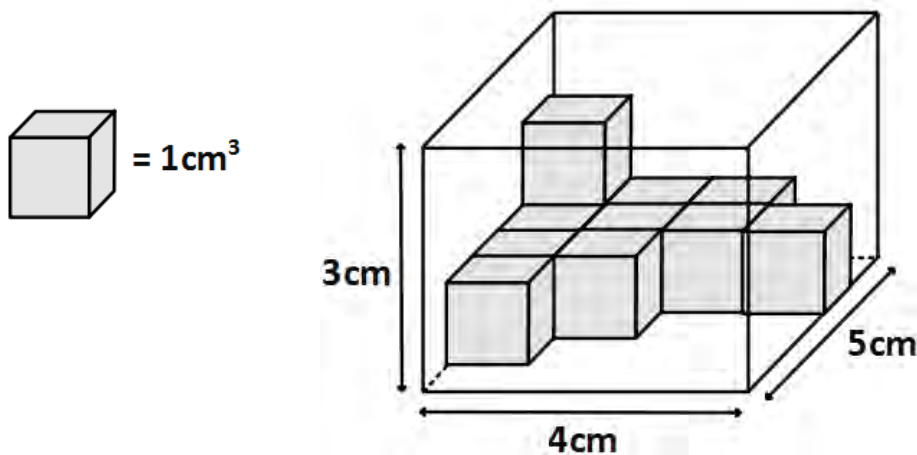
How many of these boxes would fit into the back of this van?



LO: Recognise when it is possible to use formulae for area and volume of shapes

Volume Problem 5

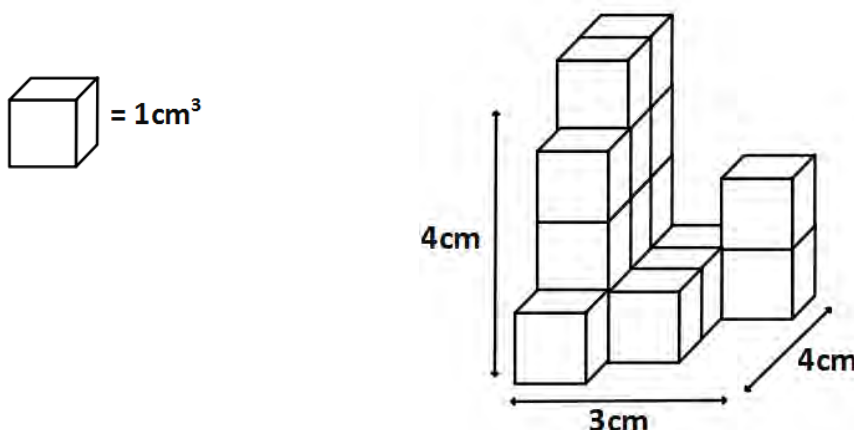
How many more **centimetre cubes** will it take to **fill** this box?



LO: Recognise when it is possible to use formulae for area and volume of shapes

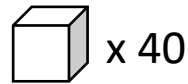
Volume Problem 6

How many more **centimetre cubes** are required to make a **cuboid** with the dimensions **3cm x 4cm x 4cm**?

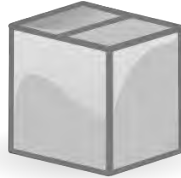


Volume Problem 7

Ben has **40** centimetre cubes?



He wants to make a box that will hold the **40** cubes **perfectly** (no gaps)

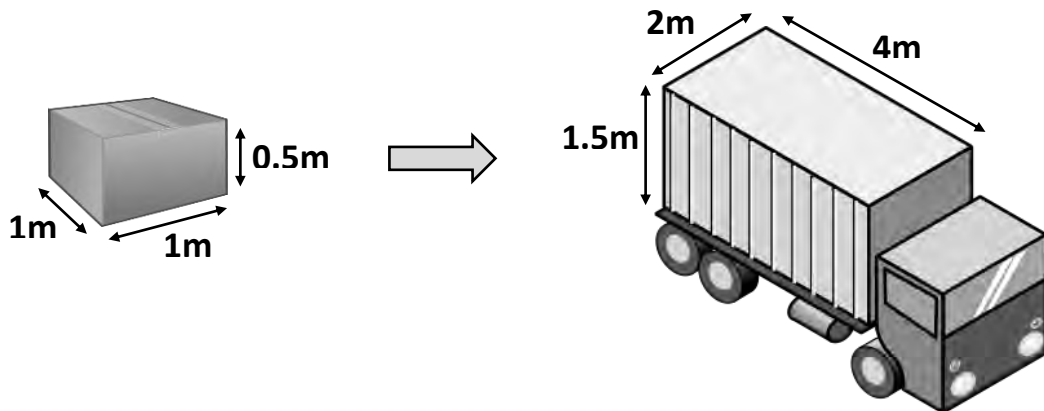


What **dimensions** could the box have?

LO: Recognise when it is possible to use formulae for area and volume of shapes

Volume Problem 8

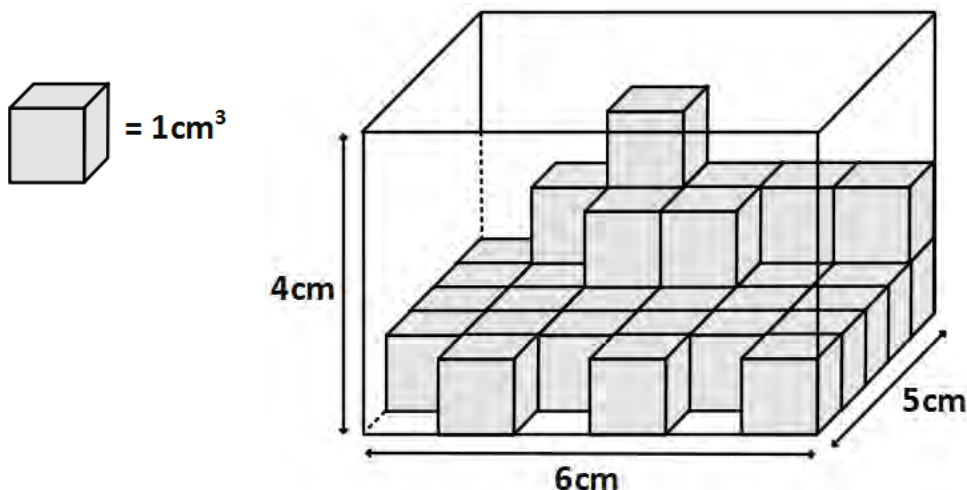
How many of these boxes would fit into the trailer of this lorry?



LO: Recognise when it is possible to use formulae for area and volume of shapes

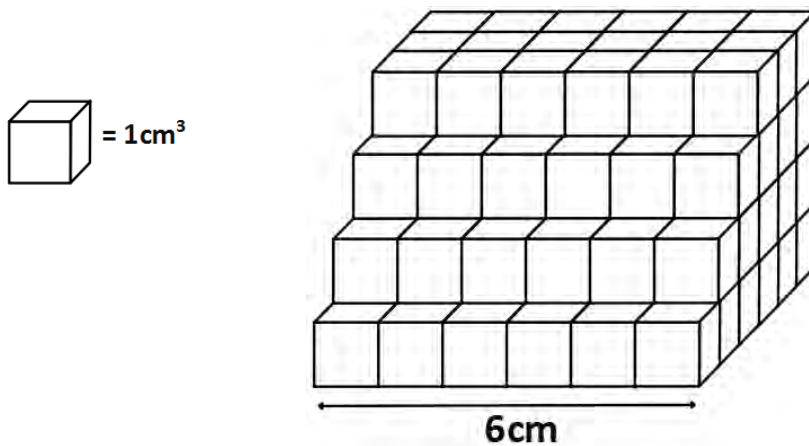
Volume Problem 9

How many more **centimetre cubes** will it take to **fill** this box?



Volume Problem 10

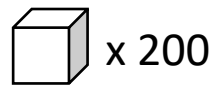
How many more **centimetre cubes** are required to finish this **cube**?



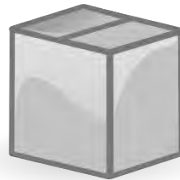
LO: Recognise when it is possible to use formulae for area and volume of shapes

Volume Problem 11

Ben has **200** centimetre cubes?



He makes a box that holds the **200** cubes **perfectly** (no gaps)



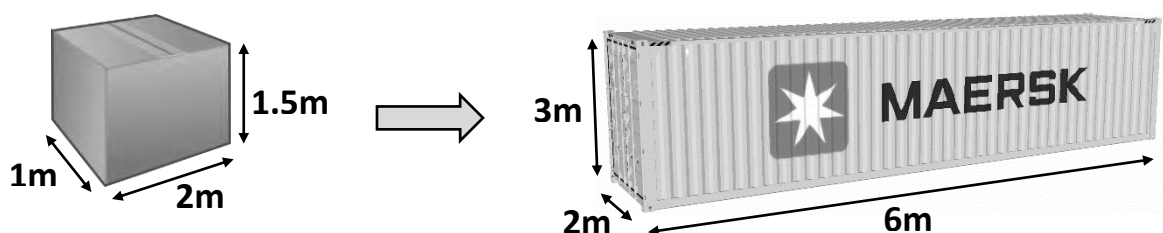
Two of the **dimensions** are **equal** in **length**.

What could the **dimensions** of the box be?

LO: Recognise when it is possible to use formulae for area and volume of shapes

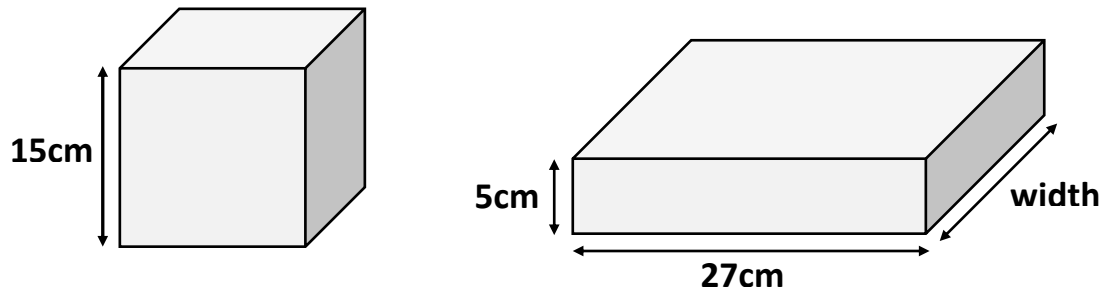
Volume Problem 12

How many of these boxes would fit into this shipping container?



Volume Problem 13

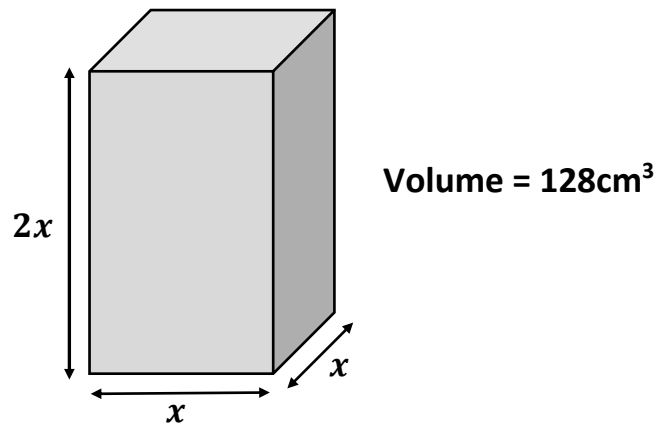
The **cube** and the **cuboid** have the same **volume**...



Calculate the **width** of the **cuboid**.

Volume Problem 14

This cuboid has a **square base** and a **volume** of 128cm^3

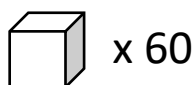


Its **height** is **twice** its **length**.

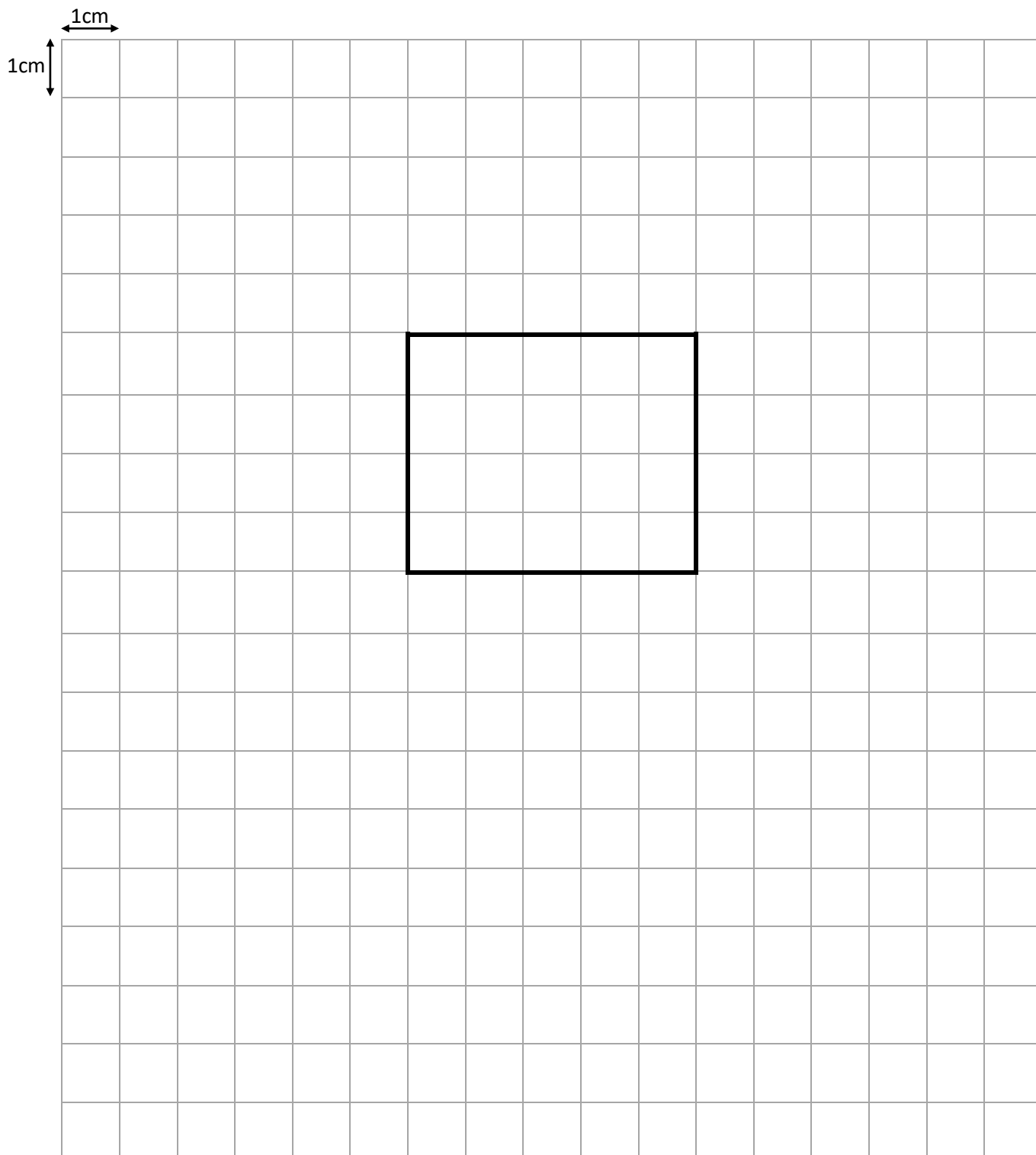
Calculate the **value** of x

Volume Problem 15

Ben has started to draw a net for a box that will hold
60 centimetre cubes **perfectly** (no gaps)



Complete the **net** for Ben's box on the centimetre square grid:



Volume Problem 1

ANSWER: 30 more cubes

Volume Problem 2

ANSWER: 10 more cubes

Volume Problem 3

ANSWER: $1 \times 1 \times 24$, $1 \times 2 \times 12$, $1 \times 4 \times 6$, $1 \times 3 \times 8$, $2 \times 2 \times 6$, $2 \times 3 \times 4$
(Order of numbers may differ)

Volume Problem 4

ANSWER: 8 boxes

Volume Problem 5

ANSWER: 49 more cubes

Volume Problem 6

ANSWER: 31 more cubes

Volume Problem 7

ANSWER: $1 \times 1 \times 40$, $1 \times 2 \times 20$, $1 \times 4 \times 10$, $1 \times 5 \times 8$, $2 \times 2 \times 10$, $2 \times 4 \times 5$
(Order of numbers may differ)

Volume Problem 8

ANSWER: 24 boxes

Volume Problem 9

ANSWER: 85 more cubes

Volume Problem 10

ANSWER: 108 more cubes

Volume Problem 11

ANSWER: $1 \times 1 \times 200$, $2 \times 2 \times 50$, $5 \times 5 \times 8$, $10 \times 10 \times 2$

Volume Problem 12

ANSWER: 12 boxes

Volume Problem 13

ANSWER: 25cm

Volume Problem 14

ANSWER: $x = 4$

Volume Problem 15

ANSWER:

