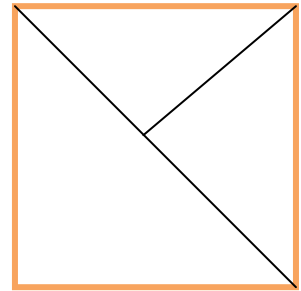


## Box puzzle

Draw a square 15cm × 15cm.

Draw as many triangles as you can inside the box.



## Rules

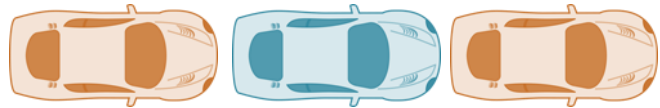
Each triangle **must** have one side exactly 4cm in length.

No triangle is allowed to overlap another.

## Parking puzzle

There is only space on a street to park some cars nose to tail. The street is 16 metres long. Your job is to see how to park the cars along the street so that they fit **exactly**. Cars can be parked on both sides of the street. One person will not be able to park and will have to go somewhere else. Who?

Name	Length of car
Simon	4.5m
Sophie	3.2m
Erica	3.4m
Bill	4.8m
Will	4.7m
Nicole	5.3m
Lauren	2.8m
Sid	3.6m
Freddy	2.9m



## Hint

You may want to draw the lengths out on paper and cut them out carefully. Instead of using metres, use centimetres.

## Shape and length puzzles

1. Draw a quadrilateral with two sides of 6 cm.
2. Draw an irregular shape with sides of: 4cm, 3cm, 8cm, 2cm, 4cm.
3. Draw a regular shape with 3 sides of exactly 7.5cm.



## Answers

### Parking puzzle

Sophie will not be able to park her car. The other cars can fit exactly with the lengths adding up to 16m on each side of the street, as follows:

One side of the street has the following cars parked along it:

Nicole (5.3m), Simon (4.5m), Erica (3.4m) and Lauren (2.8m)

The cars on the other side would be:

Bill (4.8m), Will (4.7m), Sid (3.6m) and Freddy (2.9m)