

PERIMETER OF POLYGONS



Get ready

Here is your starter.

1) What is the difference between 40 and 37?

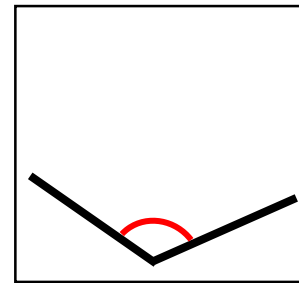
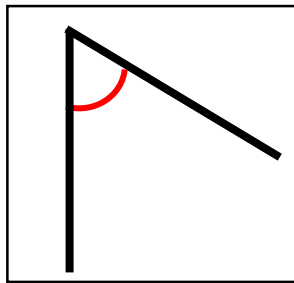
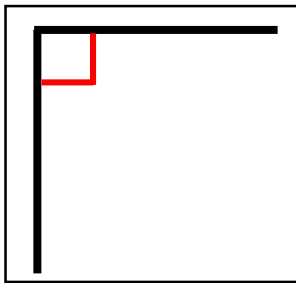
2) $10 + 8 + 12 = \underline{\quad} \times 10$

3) Match the labels to the angles.

acute angle

right angle

obtuse angle



1) What is the difference between 40 and 37?

3

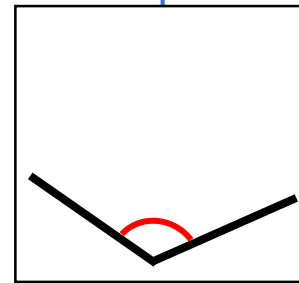
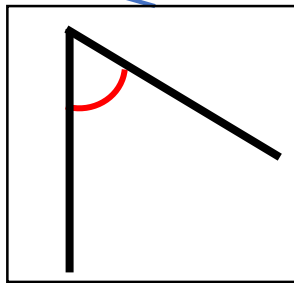
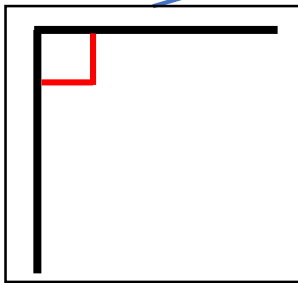
2) $10 + 8 + 12 = \underline{3} \times 10$

3) Match the labels to the angles.

acute angle

right angle

obtuse angle

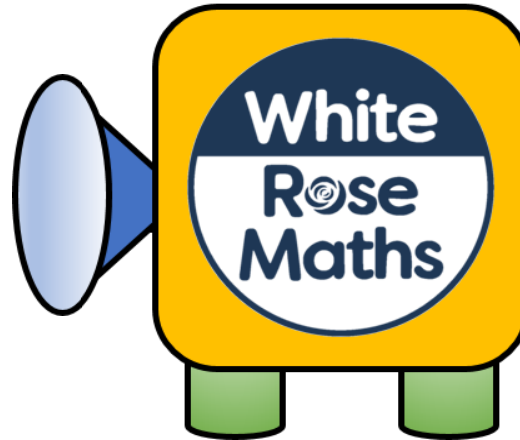
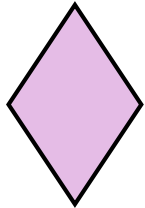




Let's learn

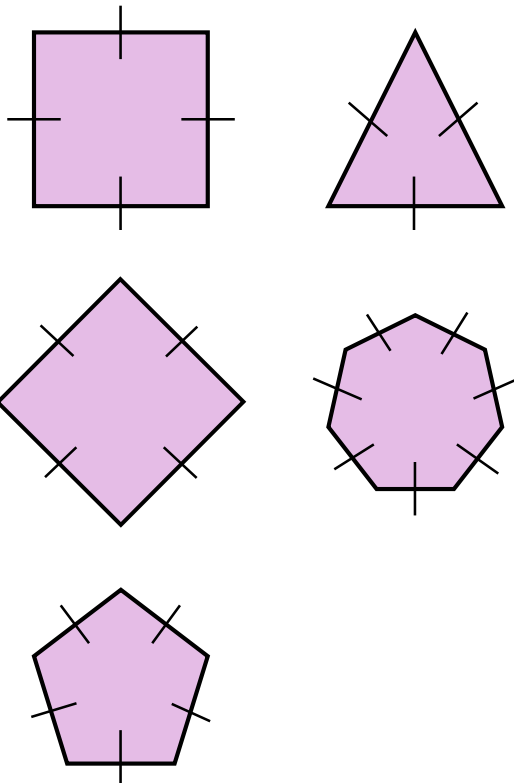
Get ready for today's
new learning.

But the sides are the
same in length!

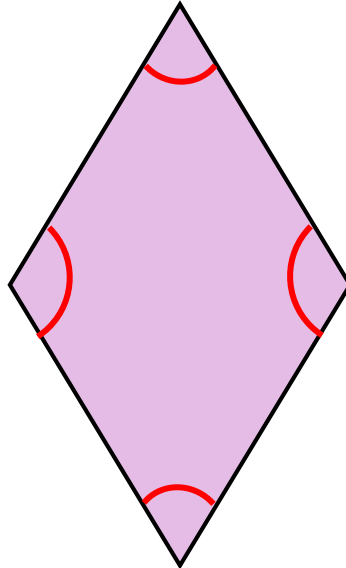


Irregular
polygon

Regular polygons



- All sides are equal in length.
- All angles are equal in size.

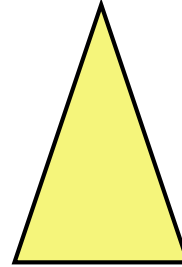
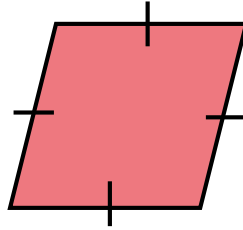
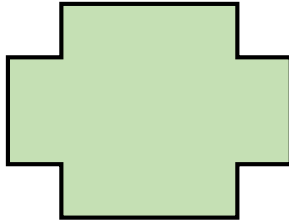


Obtuse angle

Acute angle

Sort the irregular shapes into the table.

Have a think



Lengths not equal	Angles not equal	Lengths and angles not equal

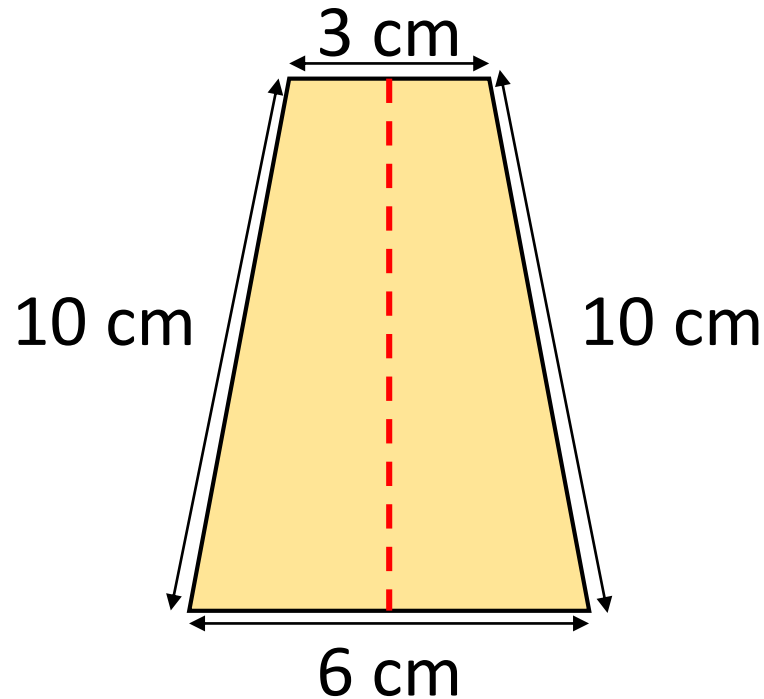


Your turn

Have a go at question
1 on the worksheet.



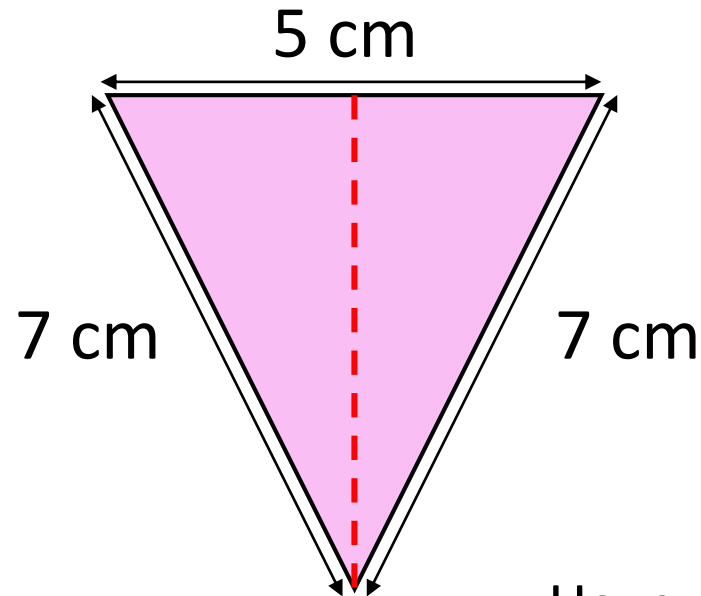
Work out the perimeter of the shape.



$$3 \text{ cm} + 10 \text{ cm} + 6 \text{ cm} + 10 \text{ cm} = 29 \text{ cm}$$

$$3 \text{ cm} + 6 \text{ cm} + 20 \text{ cm} = 29 \text{ cm}$$

Work out the perimeter of the shape.



Have a think



$$5 \text{ cm} + 7 \text{ cm} + 7 \text{ cm} = 19 \text{ cm}$$

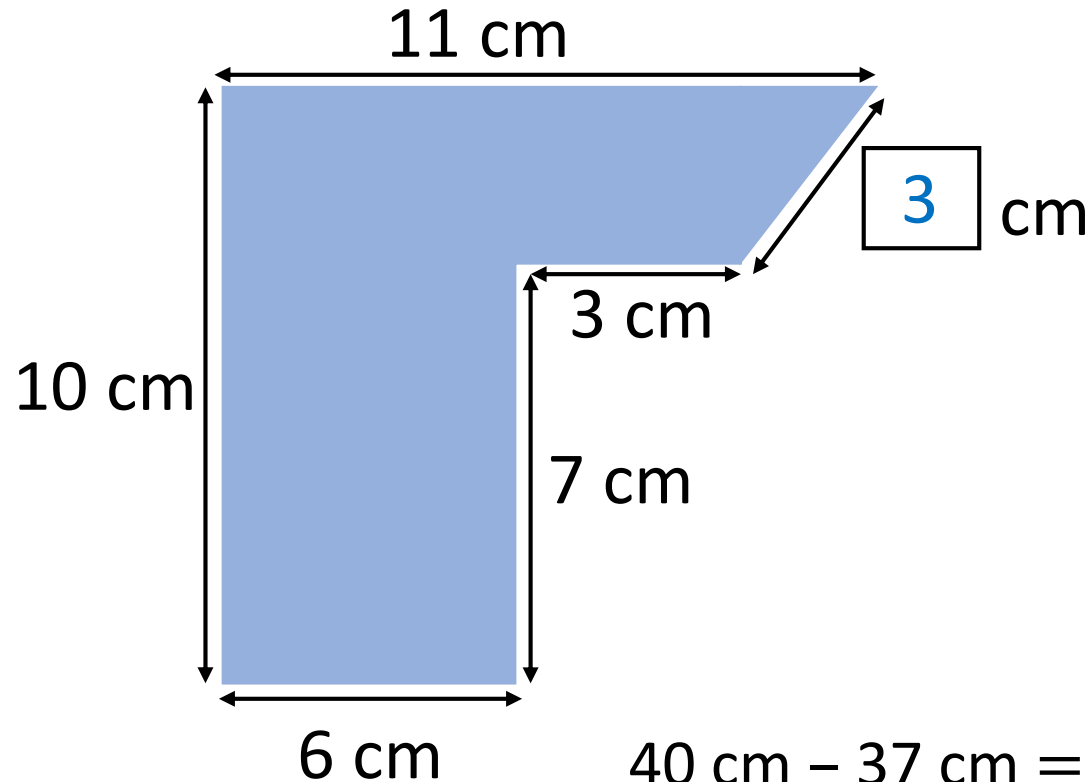


Your turn

Have a go at questions
2 and 3 on the worksheet.

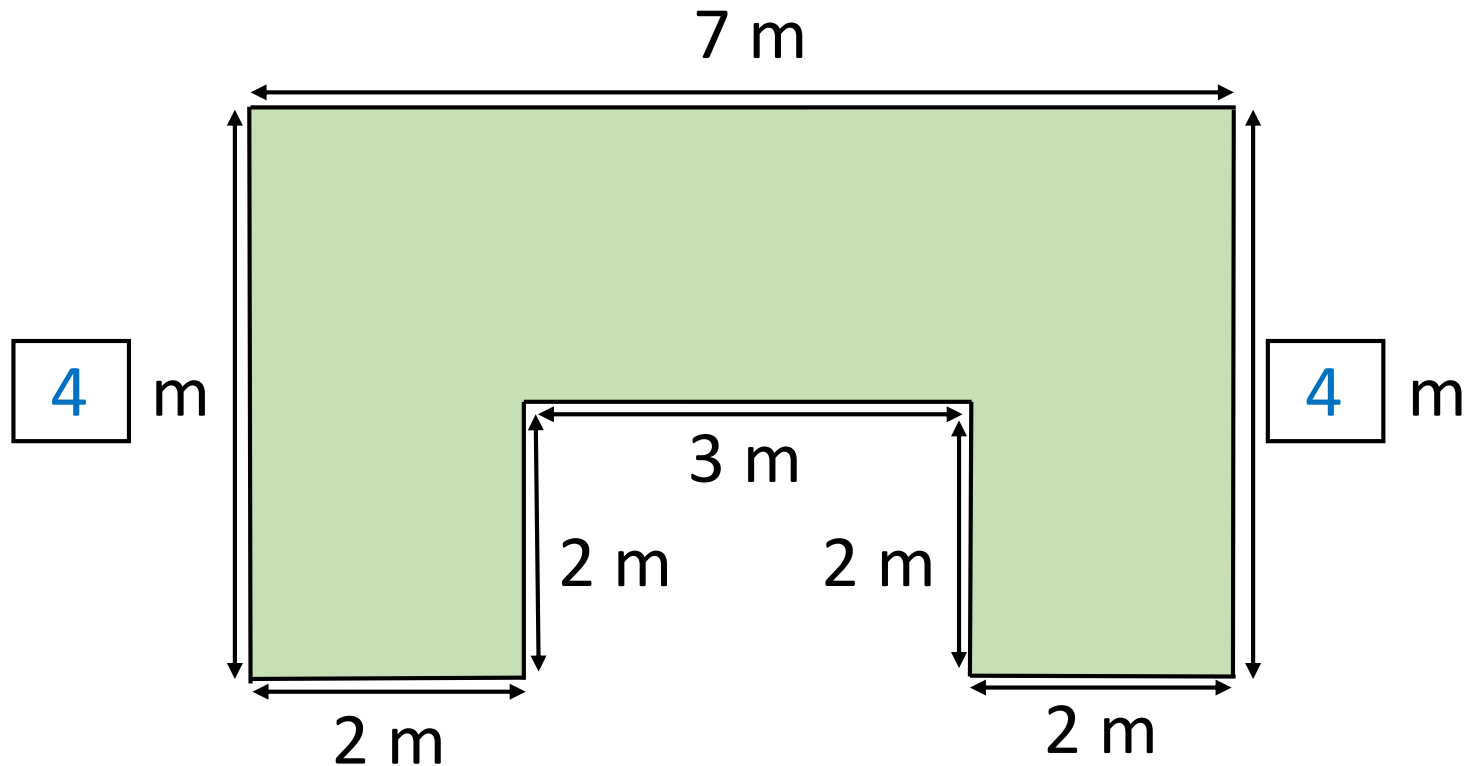


The perimeter of the hexagon is 40 cm.
Work out the unknown length.



$$3 \text{ cm} + 7 \text{ cm} + 6 \text{ cm} + 10 \text{ cm} + 11 \text{ cm} = 37 \text{ cm}$$

The perimeter of the octagon is 26 m.
Work out the unknown lengths.



$$7\text{ m} + 2\text{ m} + 2\text{ m} + 3\text{ m} + 2\text{ m} + 2\text{ m} = 18\text{ m}$$

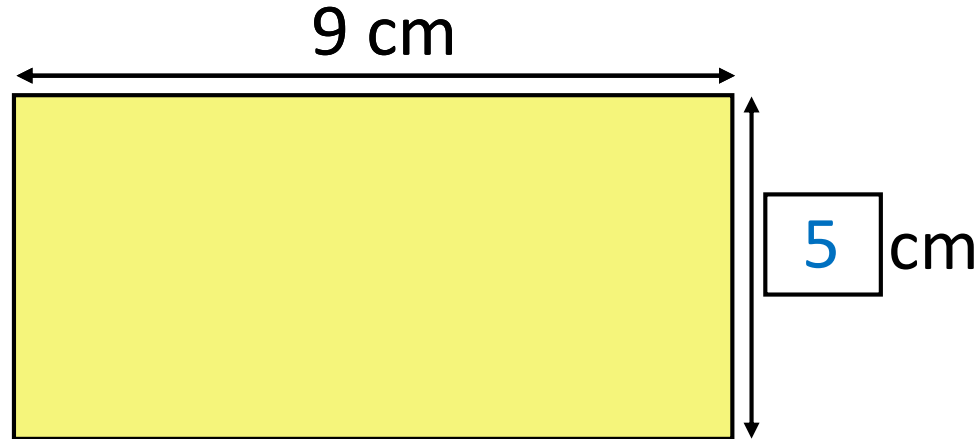
Have a think

$$26\text{ m} - 18\text{ m} = 8\text{ m}$$

$$8\text{ m} \div 2 = 4\text{ m}$$



The rectangle has a perimeter of 28 cm.
The length is 9 cm.
Work out the width of the rectangle.



$$2 \times 9 \text{ cm} = 18 \text{ cm}$$

$$28 \text{ cm} - 18 \text{ cm} = 10 \text{ cm}$$

$$10 \text{ cm} \div 2 = 5 \text{ cm}$$

The perimeter of a rectangle is 24 cm.
Each side is a whole number of centimetres.
The side marked ♥ is longer than the side marked ★.
What could the lengths of ♥ and ★ be?

Have a think

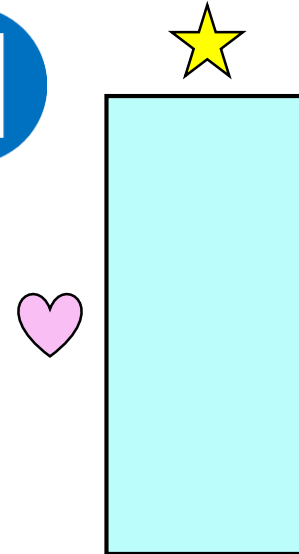


$$\text{♥} = 10 \text{ cm}$$

$$10 \text{ cm} \times 2 = 20 \text{ cm}$$

$$4 \text{ cm} \div 2 = 2 \text{ cm}$$

$$\text{★} = 2 \text{ cm}$$





Your turn

Have a go at the rest of the
worksheet

