

PERIMETER OF REGULAR POLYGONS



Get ready

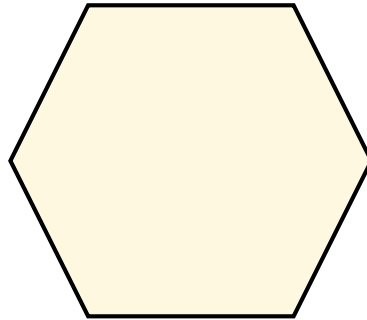
Here is your starter.

1) $15 \div \square = 5$

$15 \div \square = 3$

2) How many equal sides does a square have?

3) What is the mathematical name of the shape?

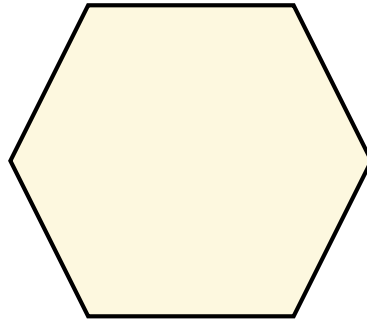


1) $15 \div \boxed{3} = 5$

$15 \div \boxed{5} = 3$

2) How many equal sides does a square have? 4

3) What is the mathematical name of the shape?



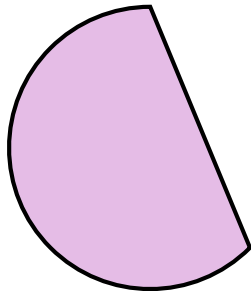
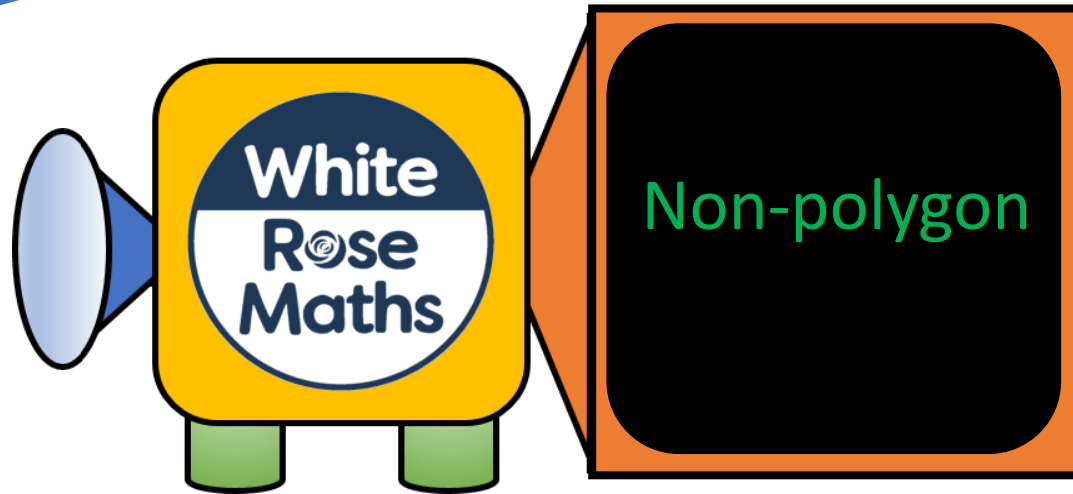
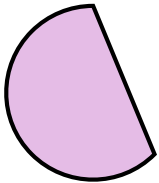
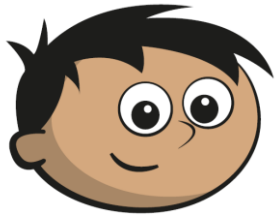
hexagon



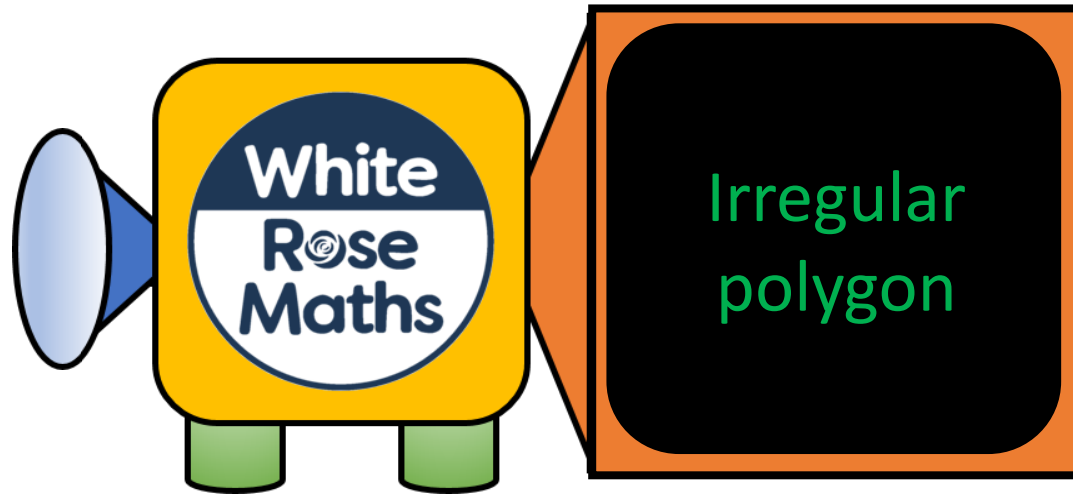
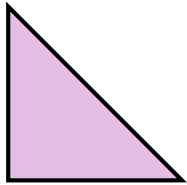
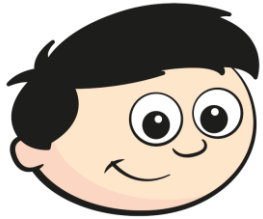
Let's learn

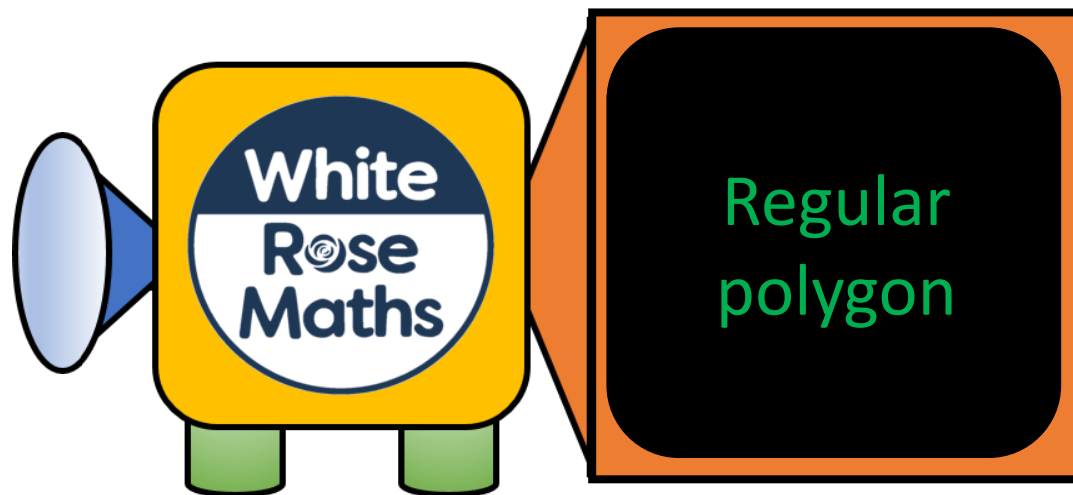
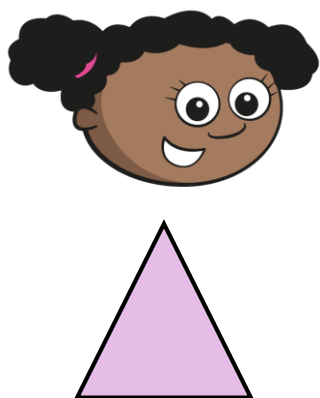
Get ready for today's
new learning.

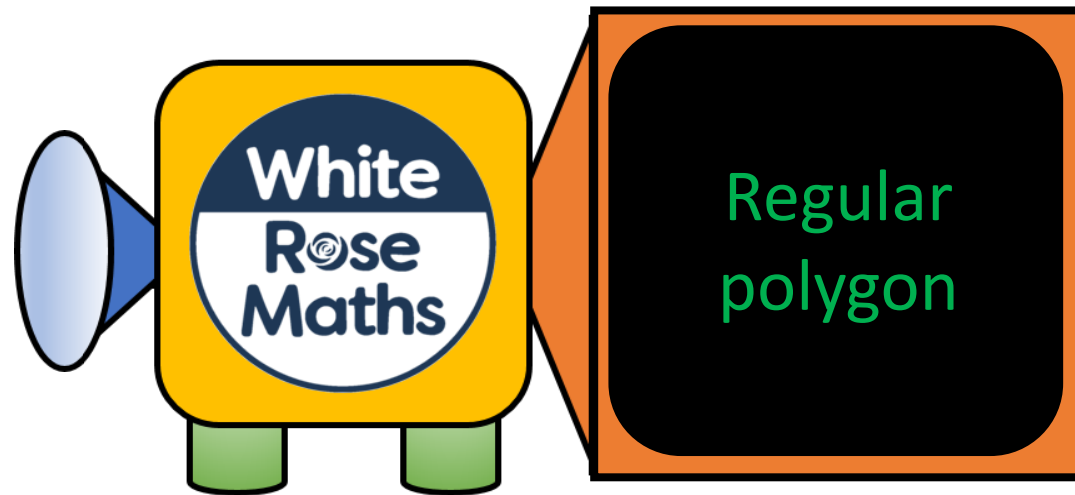
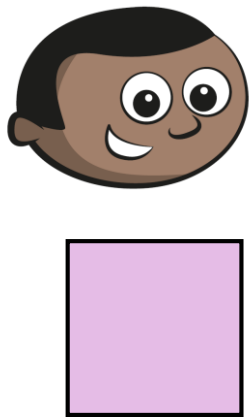
Whoops!

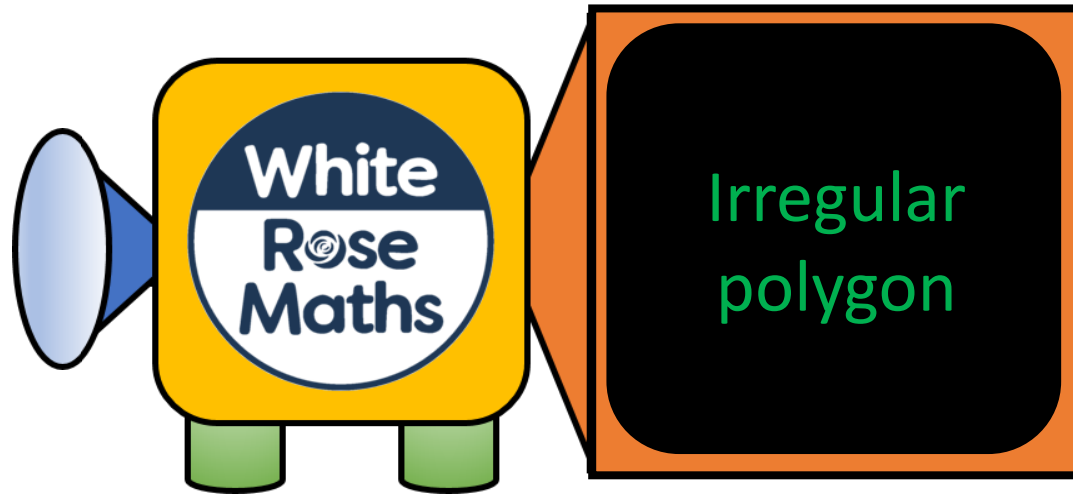
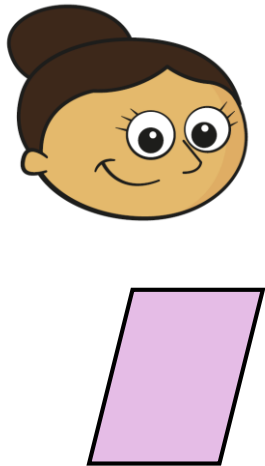


A polygon is a **closed shape** made of **straight lines**





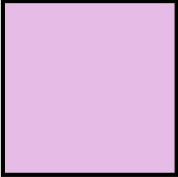
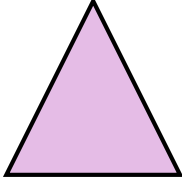
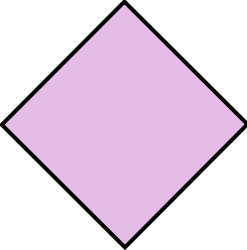
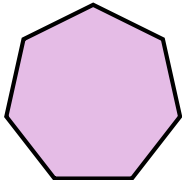
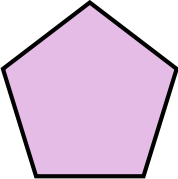
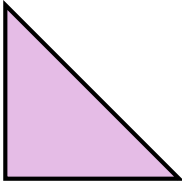
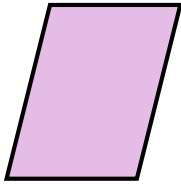
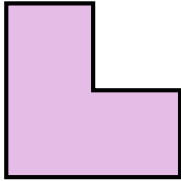
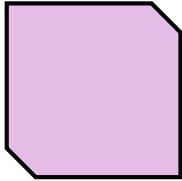
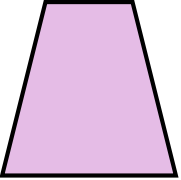




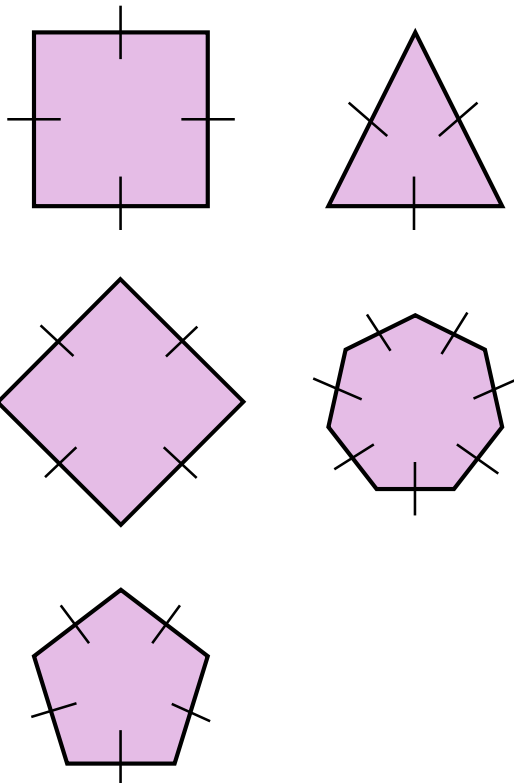
What do you think regular means?

Have a think



Regular polygons	Irregular polygons
    	    

Regular polygons



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

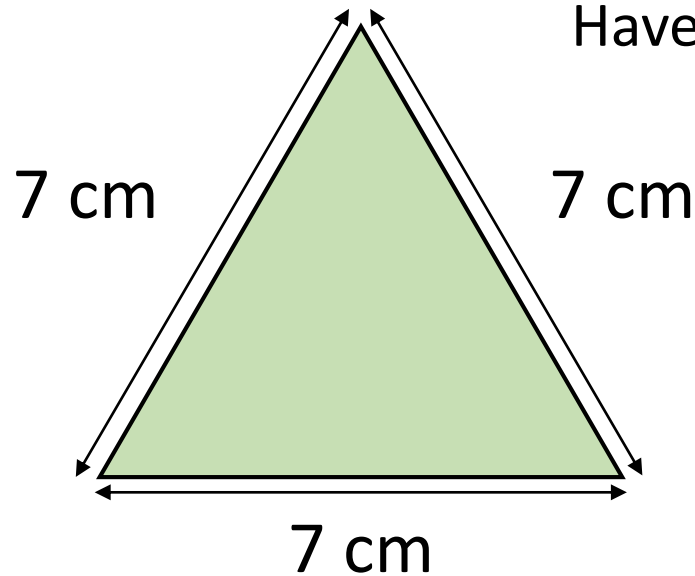


Your turn

Have a go at question
1 on the worksheet.



What is the perimeter of the shape?



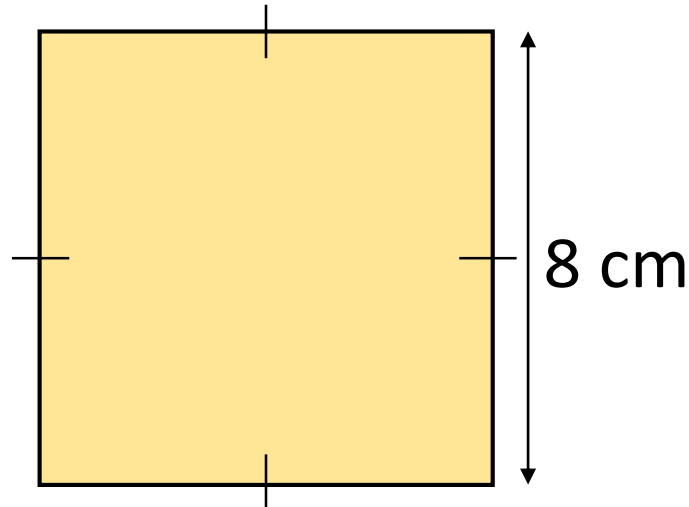
Have a think



$$7 \text{ cm} + 7 \text{ cm} + 7 \text{ cm} = 21 \text{ cm}$$

$$7 \text{ cm} + 7 \text{ cm} + 7 \text{ cm} = \underline{3} \times 7 \text{ cm} = 21 \text{ cm}$$

What is the perimeter of the shape?



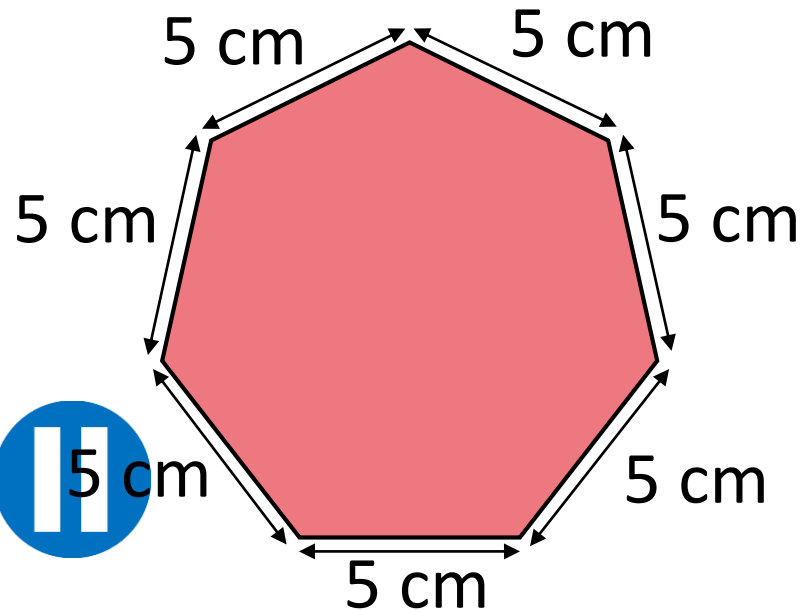
Have a think



Each side is 8 cm.

There are 4 sides, so the perimeter of the polygon is 4 × 8 cm = 32 cm

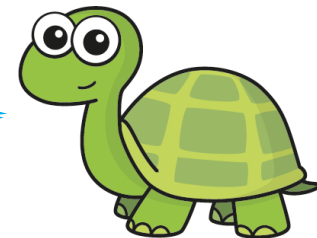
What is the perimeter of the regular polygon?



Have a think



$$7 \times 5 \text{ cm} = 35 \text{ cm}$$





Your turn

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



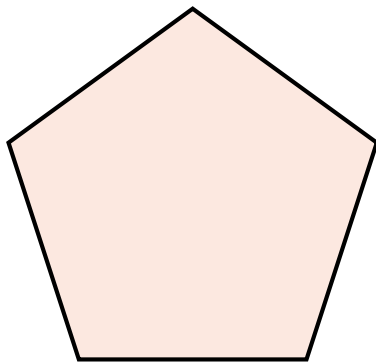
Each regular shape has a perimeter of 15 cm.
What is the length of each side?

Perimeter = 15 cm

There are 5 sides.

$$15 \div 5 = 3 \text{ cm}$$

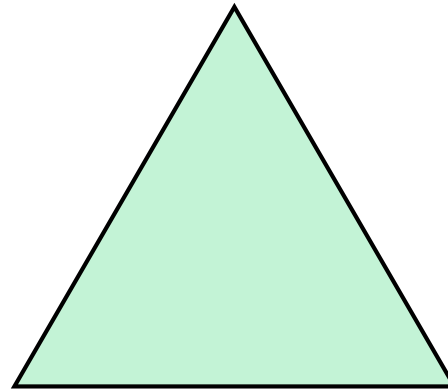
The length of each side is 3 cm.



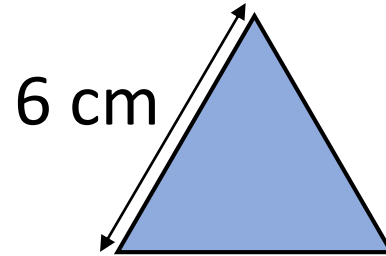
Perimeter = 15 cm
Have a think
There are 3 sides.

$$15 \div 3 = 5 \text{ cm}$$

The length of each side is 5 cm.



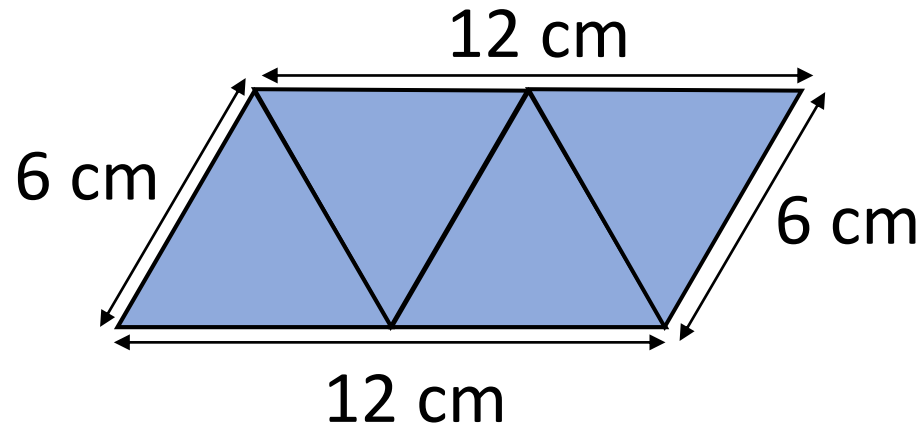
What is the perimeter of the equilateral triangle?



$$6 \text{ cm} + 6 \text{ cm} + 6 \text{ cm} = 18 \text{ cm}$$

$$3 \times 6 \text{ cm} = 18 \text{ cm}$$

What is the perimeter of the new shape?



$$6 \text{ cm} + 6 \text{ cm} + 6 \text{ cm} = 18 \text{ cm}$$

$$12 \text{ cm} + 12 \text{ cm} + 6 \text{ cm} + 6 \text{ cm} = 36 \text{ cm}$$

$$3 \times 6 \text{ cm} = 18 \text{ cm}$$



Have a think

$$4 \times 18 \text{ cm} = 72 \text{ cm}$$





Your turn

Have a go at the rest of the
worksheet

