

Mathematics

Circumference of a circle

Mr Coward

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Try this

- You will need a measuring tape OR a piece of string and a ruler
- Find circular objects in your house and measure the circumference and diameter (to the nearest millimetre)

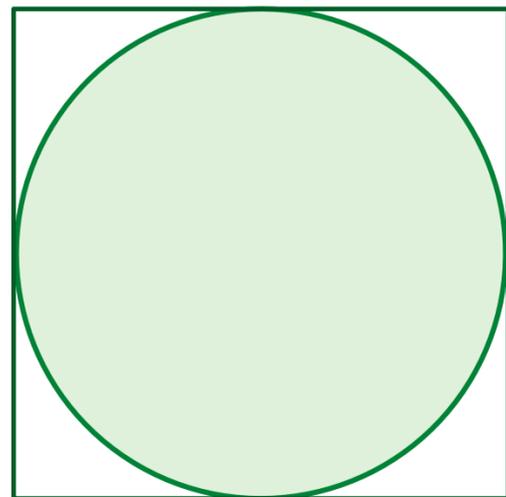
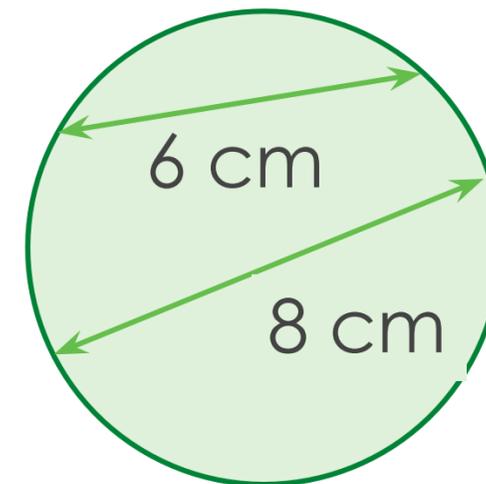
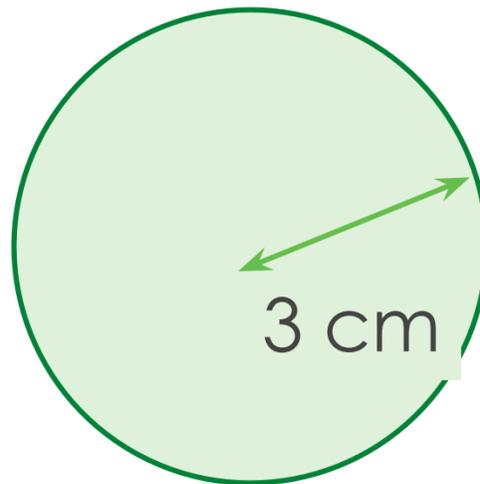
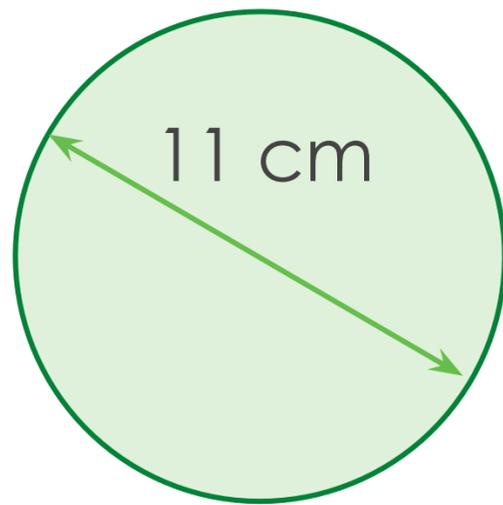
Object	Circumference	Diameter	Ratio
Sauce Pan	66.5 cm	21.2cm	
Glass	15.3 cm	4.9 cm	
Lampshade	37.7 cm	12.0cm	

To find the ratio divide the circumference by the diameter

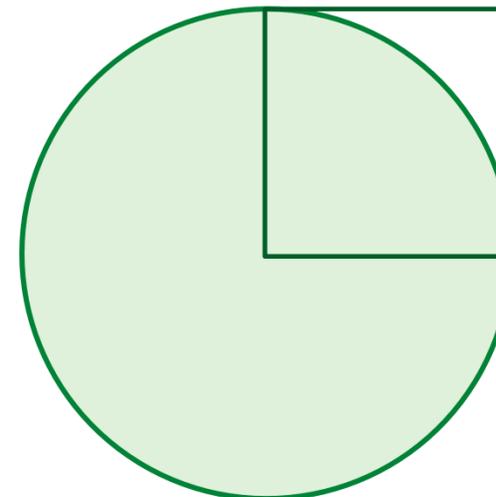


Independent task

1) Find the circumference of these shapes in exact form.



Area of square
= 81 cm

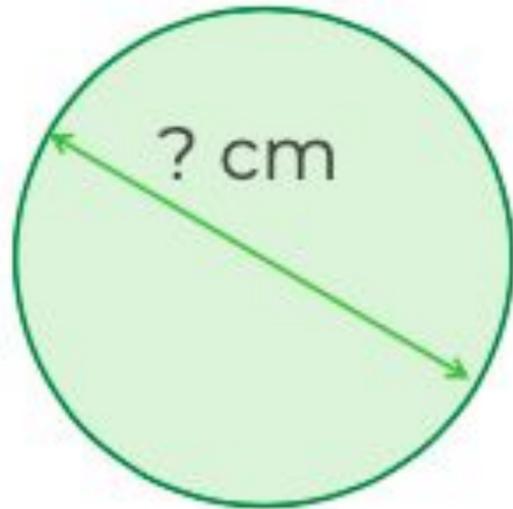


Perimeter of
square = 100 cm

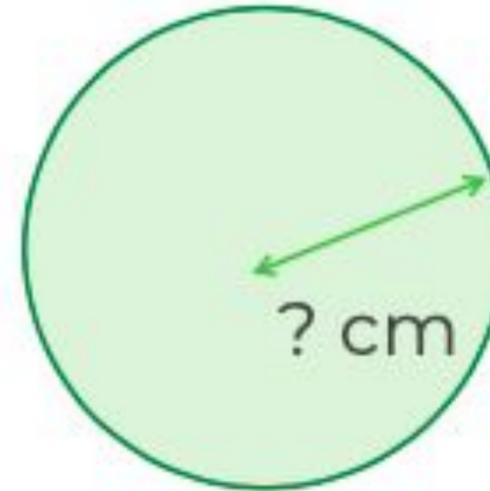


Independent task

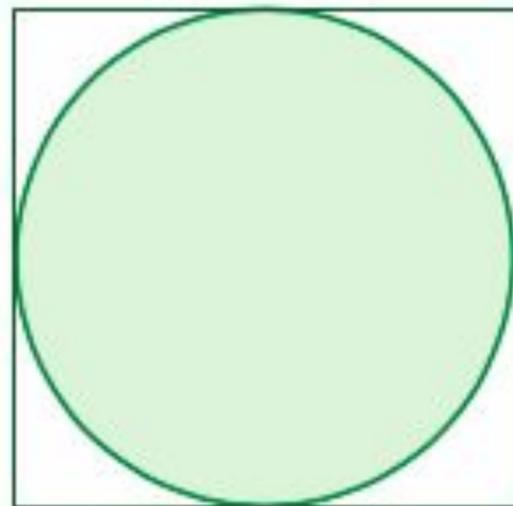
2) Find the missing length of these shapes in exact form.



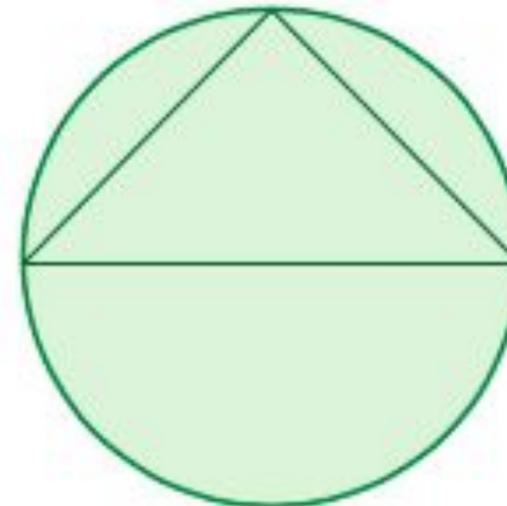
Circumference =
 $18\pi \text{ cm}$



Circumference =
 $14\pi \text{ cm}$



Circumference =
 $11\pi \text{ cm}$
Perimeter of
square = ? cm



Circumference =
 $24\pi \text{ cm}$
Area of triangle
= ? cm



Explore

Each pattern is made out of congruent semi-circular arcs. Find the length of each pattern. What do you notice?

