

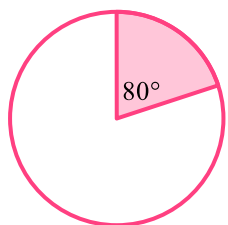
Circles and Triangles (Higher)

Measure in circles

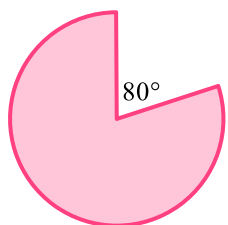
What is the radius of a circle of circumference 13cm ? Give your answer to the nearest mm .

What is the diameter of a circle with area 10cm^2 ?

Calculate the area of the sector, where the radius of the circle is 9cm .

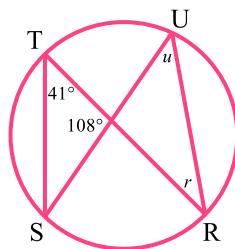


Calculate the perimeter of the remaining shape after the above sector has been removed.

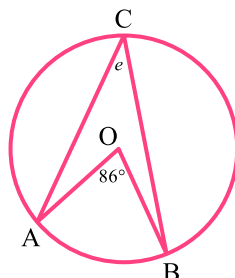


Circle theorems

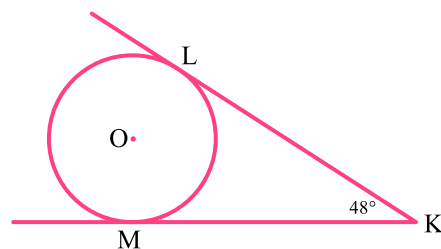
Points R, S, T and U lie on the circumference of a circle. Work out the values of u and r .



A, B and C are points on a circle with centre O. Given that $\widehat{AOB} = 86^\circ$, find the size of angle e .

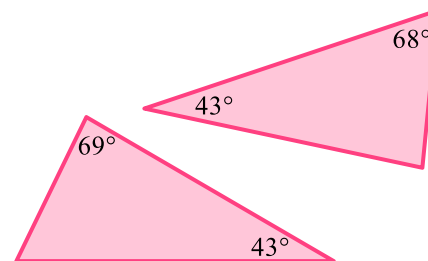


L and M are points on a circle with centre O. KL and KM are tangents to the circle. Work out the size of angle \widehat{KOL} .



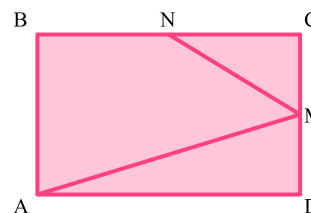
Similarity and congruence

Are these triangles congruent, similar, or neither?



Using trigonometry

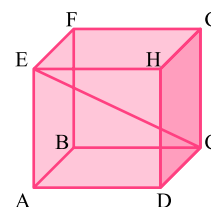
ABCD is a rectangle. M is the midpoint of CD. N is the midpoint of BC. $AB = 6\text{cm}$. $AD = 8\text{cm}$. Find the size of angle \widehat{AMN} .



3D Trigonometry

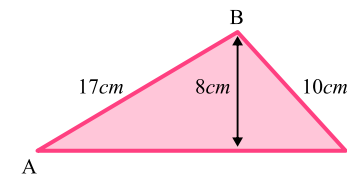
Pictured is a cuboid with $AB = 2\text{cm}$, $AD = AE = 4\text{cm}$. Calculate:

- the length of CE
- the angle of \widehat{ACE}



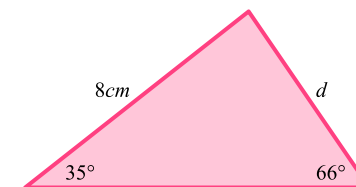
Using Pythagoras' Theorem

Determine the length of AC.



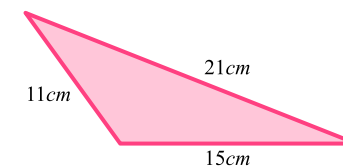
Sine Rule

Work out the length of side d .



Cosine Rule

Calculate the size of the largest angle in this triangle.



Area of a triangle

Calculate the area of this triangle.

