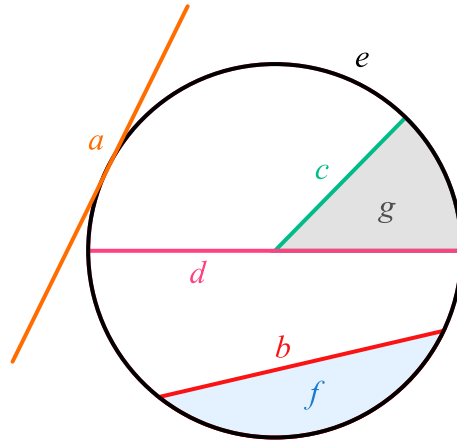


## Circle terminology

Name the parts of the circle labelled:

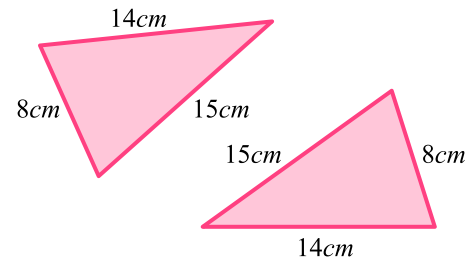
- a) Tangent
- b) Chord
- c) Radius
- d) Diameter
- e) Circumference
- f) Segment
- g) Sector



## Similarity and congruence

Are these triangles congruent, similar, or neither?

= Congruent (SSS)



## Exact trigonometric values

State the exact value of  $\sin 30^\circ$ .

$$= \frac{1}{2}$$

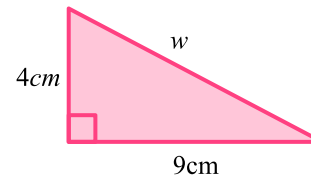
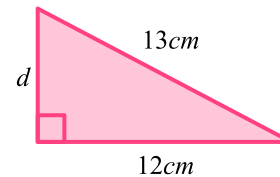
State the exact value of  $\cos 45^\circ$ .

$$= \frac{\sqrt{2}}{2}$$

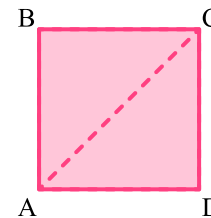
State the exact value of  $\tan 60^\circ$ .

$$= \sqrt{3}$$

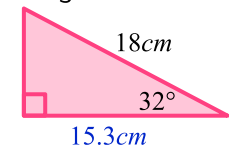
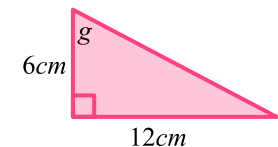
## Pythagoras' Theorem

Calculate length  $w$ . = 9.8cmCalculate length  $d$ . = 5cm

ABCD is a square. AC = 8cm

Find the area of this square. = 5.7cm<sup>2</sup>

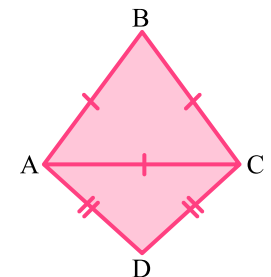
## Trigonometry

Calculate length  $t$ .Calculate the size of angle  $g$ . = 63.4°

ABCD is a kite. AC = 10cm.

Angles BAD and BCD are right angles.

Find the perimeter of the kite.



= 34.5cm (to 1dp)

## Measures in circles

What is the circumference of a circle of radius 4cm?

$$= 25.1\text{cm (to 1dp)}$$

What is the area of a circle of diameter 9cm?

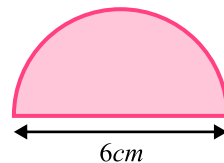
$$= 63.6\text{cm}^2 \text{ (to 1dp)}$$

What is the diameter of a circle whose area is 163cm<sup>2</sup>?

$$= 14.4\text{cm (to 1dp)}$$

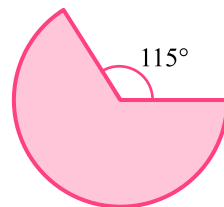
## Measures in portions of circles

Work out the perimeter of this semicircle.



$$= 15.4\text{cm (to 1dp)}$$

Work out the shaded area, which has been formed by removing a sector from a circle of radius 7cm.



$$= 104.8\text{cm}^2 \text{ (to 1dp)}$$