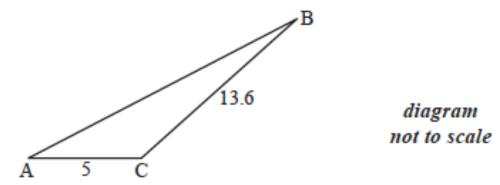


Sector and triangle (paper 2)

1. The following diagram shows the triangle ABC.

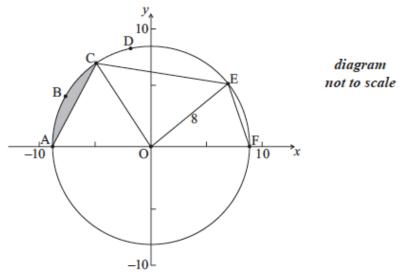


The angle at C is obtuse, AC = 5 cm, BC = 13.6 cm and the area is 20 cm^2 .

- (a) Find the angle ACB.
- (b) Find AB.



2. The diagram below shows a circle with centre O and radius 8 cm.



The points A, B, C, D, E and F are on the circle, and [AF] is a diameter. The length of arc ABC is 6 cm.

- (a) Find the size of angle AOC.
- (b) Hence find the area of shaded region.

The area of sector OCDE is 45 cm^2 .

- (c) Find the size of angle COE.
- (d) Find EF.

BDP Mathematics (SL) Sector and triangle (Paper 2)	Learnin

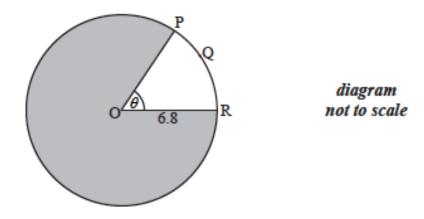


3. Consider the triangle ABC, where AB = 10, BC = 7 and angle CAB = 30° .

(a) Find the two possible values of angle ACB.(b) Hence, find angle ABC, given that it is acute.		



4. Consider the following circle with centre O and radius 6.8 cm.



The length of the arc PQR is 8.5 cm.

- (a) Find the value of θ .
- (b) Find the area of the shaded region.