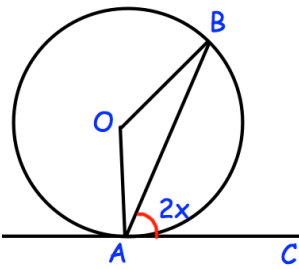




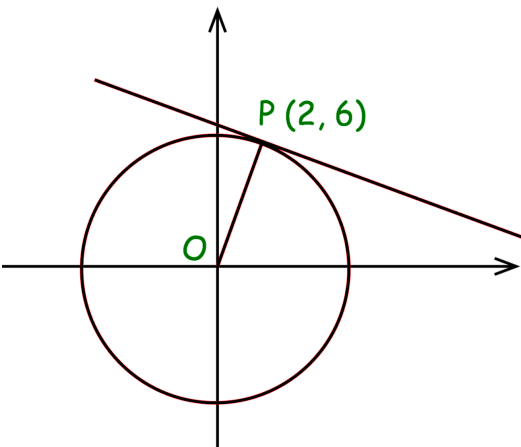
There are 12 students in Class A and 15 students in Class B.  
 Class A and Class B sat a test.  
 The mean score for the 12 students in Class A was 30  
 The mean score for all 27 students was  $y$

Find an expression in terms of  $y$  for the mean score for the students in Class B.



Prove that angle  $AOB = 4x$   
 Give reasons for each stage of your working.

A and B are points on the circumference of a circle, centre O.  
 CA is a tangent to the circle.  
 Angle  $CAB = 2x$



Find the area of the circle

Find the equation of the tangent

The diagram shows the circle  $x^2 + y^2 = 40$  with a tangent at the point  $(2, 6)$