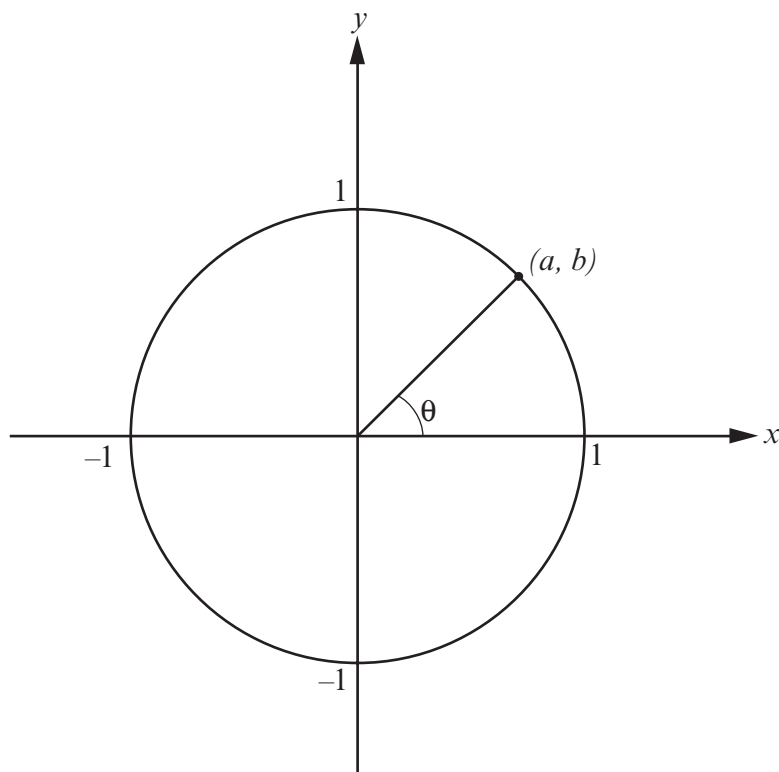


14. The sketch below shows a circle with its centre at the origin and radius 1 unit. The point  $(a, b)$  is a point on the circumference of the circle.



- (a) The angle  $\theta$  is shown on the diagram. Complete the following statements, in terms of  $a$  and  $b$ .

(i)  $\sin \theta =$

(ii)  $\tan \theta =$

[3]

- (b) Consider a general point  $(x, y)$  on the circumference of the circle to write down an equation of the circle in terms of  $x$  and  $y$ .

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.....

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[2]