



Maths
Junior Certificate
Higher Level

Past Exam Questions on
PM Geometry Proofs

Q10 2012 Paper 2 sample Paper

Question 10

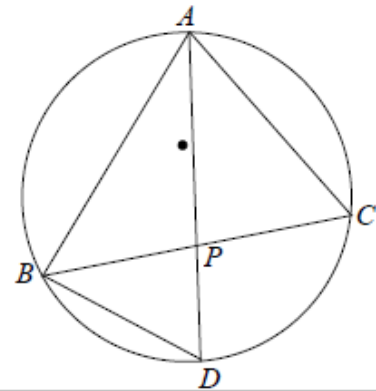
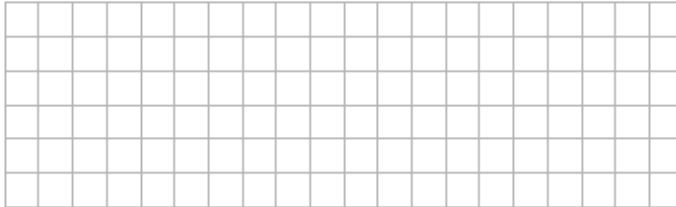
(Suggested maximum time: 5 minutes)

A, B, C and D are four points on a circle as shown.

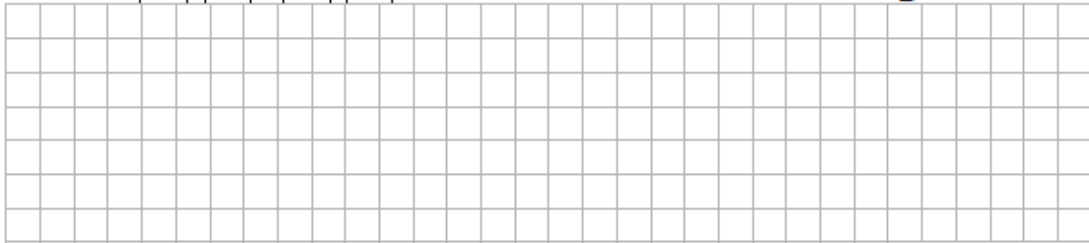
$[AD]$ bisects $\angle BAC$.

P is the point of intersection of AD and BC .

(a) Show that $\triangle ADB$ and $\triangle APC$ are similar.



(b) Show that $|AC| \cdot |BD| = |AD| \cdot |PC|$



Q14 2012 Paper 2

Question 14

(Suggested maximum time: 10 minutes)

Prove that the angle at the centre of a circle standing on a given arc is twice the angle at any point of the circle standing on the same arc.

Diagram:

<i>Given:</i>	
<i>To Prove:</i>	
<i>Construction:</i>	
<i>Proof:</i>	