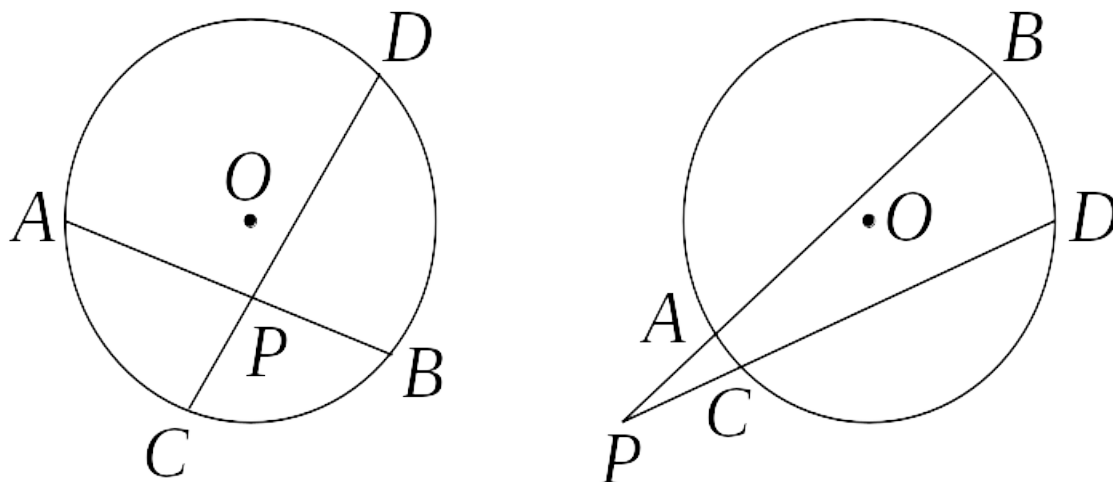


Mathematics 2260H – Geometry I: Euclidean Geometry

TRENT UNIVERSITY, Winter 2021

Assignment #6 – Chords and Ratios

Due on Friday, 5 March.



1. Suppose  $AB$  and  $CD$  are different chords of a circle with centre  $O$ . Show that if (the extensions of)  $AB$  and  $CD$  intersect at some point  $P$ , then  $|PA| \cdot |PB| = |PC| \cdot |PD|$ .  
[10]

HINT. Two of the possible cases are displayed in the diagram above. Similarity can be a big help here.