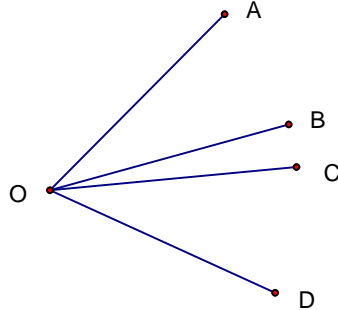


Beginning Proofs

Prove: If $\angle AOC = \angle BOD$ then $\angle AOB = \angle COD$



Statement

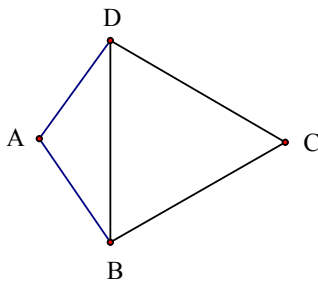
1. $\angle AOC = \angle BOD$
2. $\angle AOC = \angle AOB + \angle BOC$
3. $\angle BOD = \angle COD + \angle BOC$
4. $\angle AOC = \angle COD + \angle BOC$
5. $\angle AOB + \angle BOC = \angle COD + \angle BOC$
6. $\angle BOC = \angle BOC$
7. $\angle AOB = \angle COD$

Reason

- Given
 An angle is the sum of its parts
 An angle is the sum of its parts
 Transitivity lines 1, 3
 Transitivity lines 2, 4
 Reflexive law of equality
 Subtraction law of equality lines 5, 6

Homework / Classwork

1.

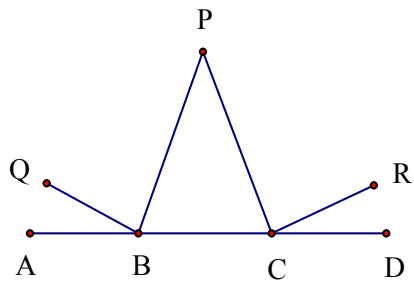


- Given:
 $\angle ABC$ and $\angle ADC$ are right angles.
 $\angle ADB = \angle ABD$
 $\angle CDB = \angle C$
 Prove: $\angle DBC = \angle C$

Statement

Reason

2.



Statement

Given:

ABCD is straight.

$\angle PBC = \angle PCB$

$\angle QBP = \angle RCP$

Prove:

$\angle QBA = \angle RCD$

Reason

3.



Statement

Given:

$AB = CD$

Prove:

$AC = BD$

Reason