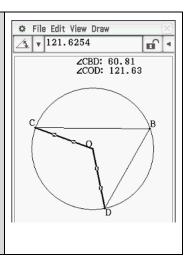
## Activity 16 Angles subtended by the same arc

**Aim:** Verify and prove angles on the same arc theorem.

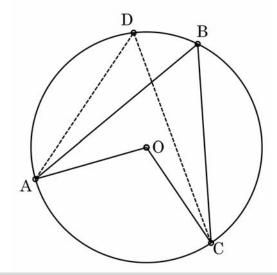
Open the saved diagram from the activity Angle at the centre.

## Constrain the centre and radius

- Tap the centre point O
- Tap **b** to go round the corner
- With co-ordinates selected in the Measure dropdown menu, tap olock the position
- Tap in open space
- Tap to select the circle
- Tap 🚮 to lock the radius



- 1. Drag point B around the circle. What do you notice about the size of  $\angle CBD$ ?
- 2. For what positions of B on the circle are the ClassPad measurements contradictory?
- 3. Complete the proof that angles at the circumference subtended by the same arc are equal.
  I.e. prove ∠ABC =∠ADC



Statement	Reason
Let $\angle ABC = \alpha$	
∠AOC =	(i)
∠ADC =	(ii)