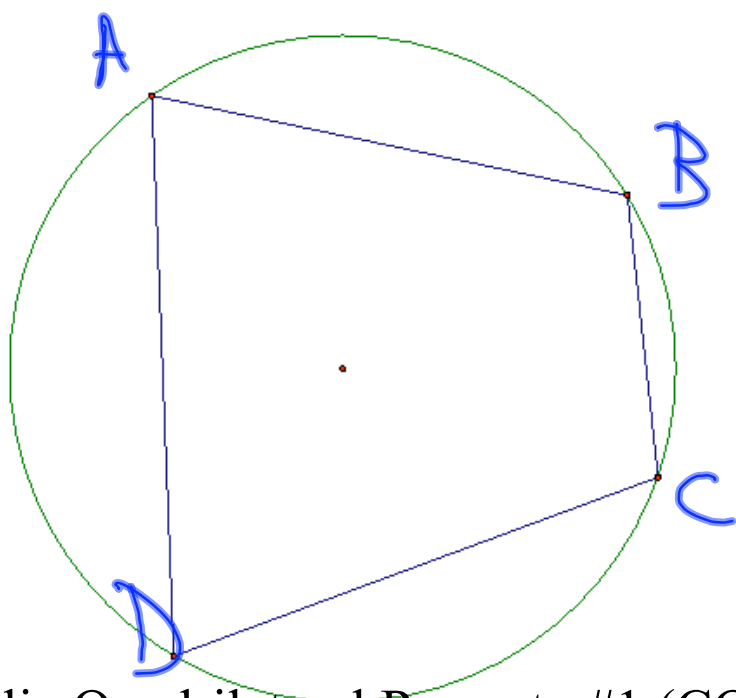


Day 4 - Cyclic Quadrilaterals

Measure each interior angle of the following cyclic quadrilateral:

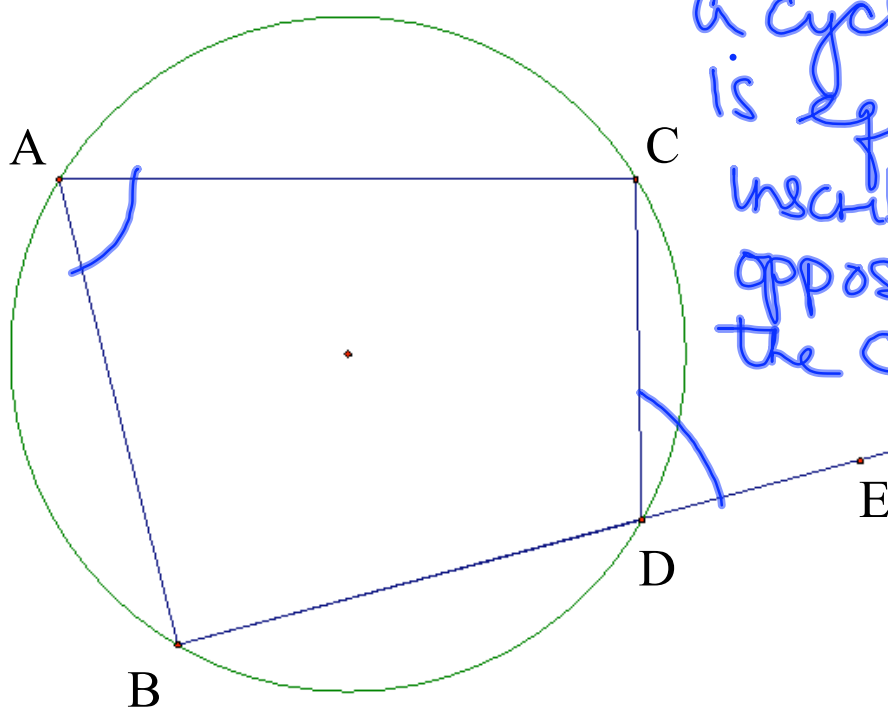


Opposite \angle 's
in a Cyclic
Quad. and
to 180° .

Cyclic Quadrilateral Property #1 (CQ1):

What conclusion can you make about the angles in a cyclic quadrilateral?

Measure the interior angles of the following cyclic quadrilateral.
Also measure $\angle CDE$.

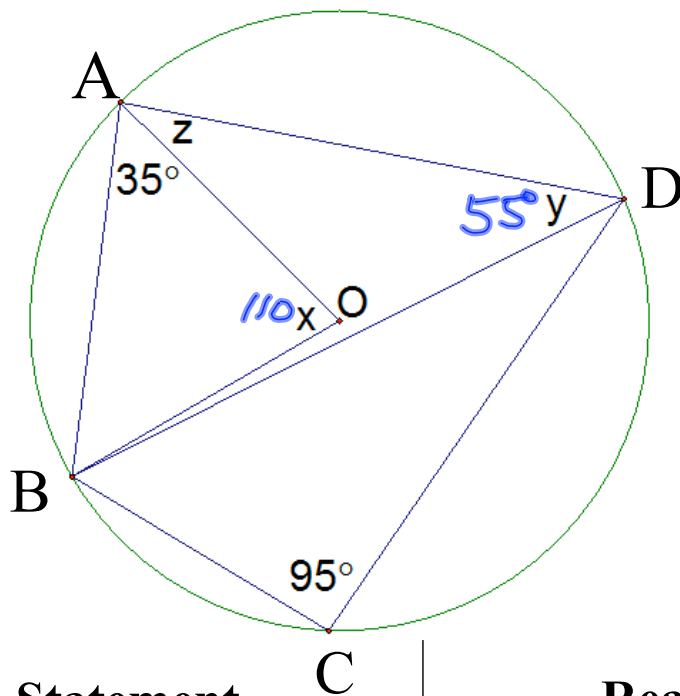


Exterior \angle of
a cyclic quad.
is equal to the
inscribed \angle on the
opposite side of
the chord.

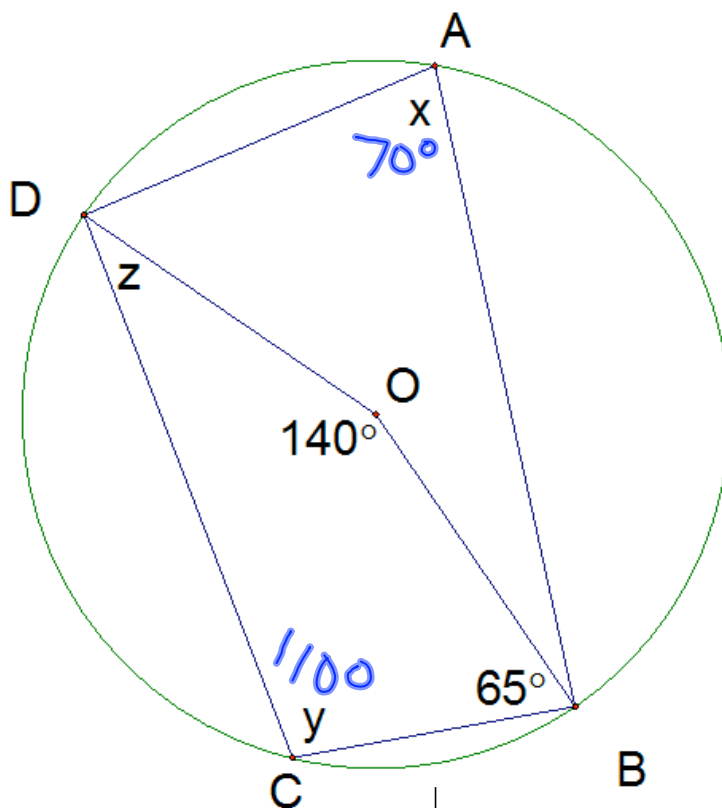
What conclusion can you make about the relationship
between an exterior angle of a cyclic quadrilateral and its interior angles?

Cyclic Quadrilateral Property #2 (CQ2):

For each of the following diagrams, determine the values of x , y and z given that O is the centre of the circle.



Statement	Reason
1. $\angle x = 180 - 35 - 35 = 110^\circ$	1. Isosceles Δ .
2. $\angle y = \frac{110}{2} = 55^\circ$	2. CAT
3. $\angle z = 180 - 95 - 35 = 50^\circ$	3. COI

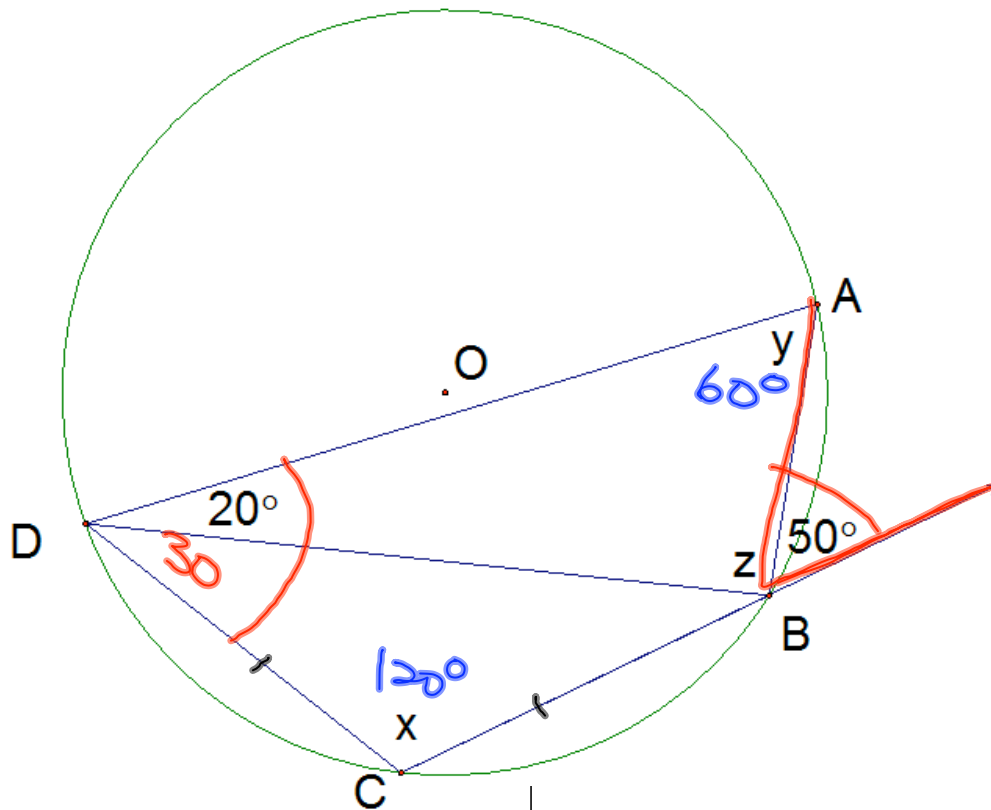


Statement

Reason

1. $\angle X = \frac{140}{2} = 70^\circ$
2. $\angle y = 180 - 70 = 110^\circ$
3. $\angle z = 360 - 110 - 65 - 140 = 45^\circ$

1. CAT
2. CQ |
3. Defn of Quad.



Statement

Reason

1. $\angle BDC = 30^\circ$
2. $\angle X = 180 - 30 - 30 = 120^\circ$
3. $\angle y = 180 - 120 = 60^\circ$
4. $\angle z = 180 - 60 - 20 = 100^\circ$

1. CQR
2. Isosceles
3. CQI
4. Defn Δ .

Assignment:
Pg. 464 1-3, 5-11
Pg. 472 1-4