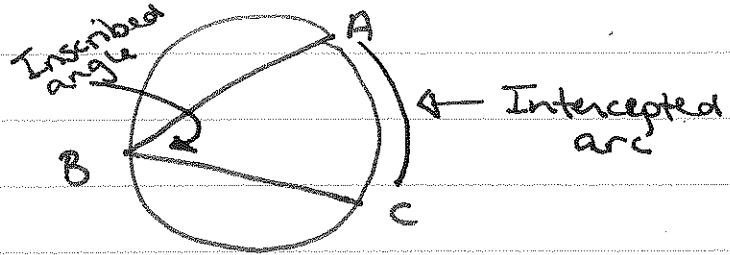


## 12.3 Inscribed Angles

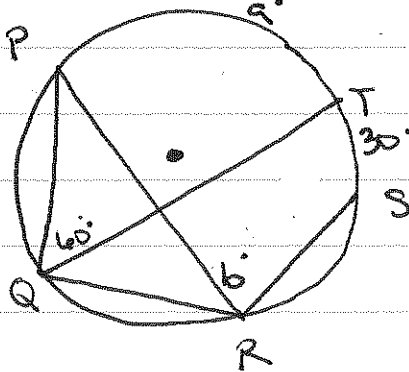
The measure of an inscribed angle is half the measure of its intercepted arc

$$m\angle B = \frac{1}{2} m\widehat{AC}$$



Ex. 1 Find a and b

P. 679

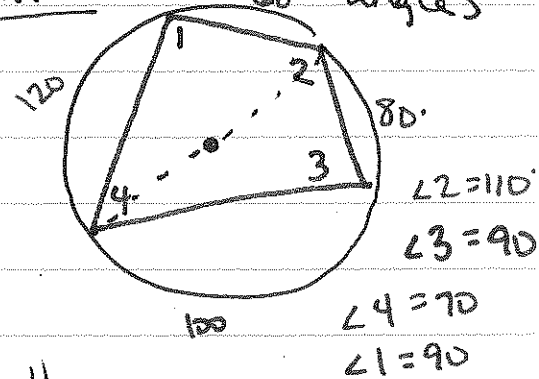


$$a = 120^\circ$$

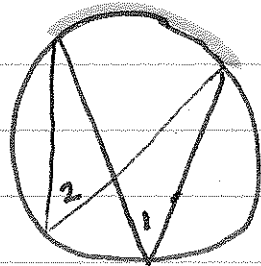
$$b = 75^\circ$$

P. 680

Ex. 2 Find missing 60° angles



Two inscribed angles intercepted by the same arc are congruent

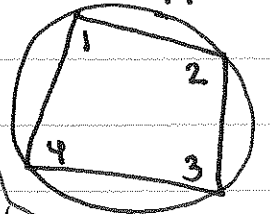


$$\angle 1 \cong \angle 2$$

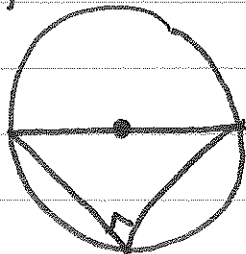
The opposite angles of a quadrilateral inscribed in a circle are supplementary

$$\angle 1 + \angle 3 = 180$$

$$\angle 2 + \angle 4 = 180$$



An angle inscribed in a semicircle is a right angle



The measure of an angle formed by a tangent and a chord is half the measure of the intercepted arc

$$m\angle C = \frac{1}{2} m\widehat{BDC}$$

