Grade 9 - March 2nd Week

Alternative Angles, Corresponding Angles and Allied Angles

• To revise your knowledge, do the revision

Angles related to straight lines

Theorem

The sum of the adjacent angles formed by a straight line meeting another straight line is two right angles.



AÔB + BÔC = 180° (angles on a straight line)

Ex: - Find the value of x.



AÔC + CÔD + BÔD = 180° (angles on a straight line)

$$2x^{\circ} + x^{\circ} + 60^{\circ} = 180^{\circ}$$

 $3x^{\circ} + 60^{\circ} = 180^{\circ}$
 $3x^{\circ} = 120^{\circ}$
 $3x^{\circ} = 40^{\circ}$

• Do the exercise 8.1

Opposite Angles

Theorem

The vertically opposite angles formed by the intersection of two straight lines are equal.



AÔB = CÔD (opposite angles)

Ex: - in the figure given below AB and CD straight lines are intersecting to each other. If $A\hat{O}D = 70^{\circ}$ Find the value of $B\hat{O}C$



AÔD = BÔC (Opposite angles)

AÔD = 70°

Therefor <u>BÔC = 70°</u>

• Do the exercise 8.2