**CONSTRUCTION OF QUUADRILATERAL**

A Quuadrilateral, as the name implies, is a plane figure enclosed by four straight lines, or it is a 4-sided plane figure. The four angles of a Quuadrilateral sum up to 3600.

There are different types of Quuadrilaterals,they are square, rectangle, parallelogram,rhombus and trapezium.

Example; Construct a Quuadrilateral PQRS,such that PS^R=600,/PS/=8cm, /QR/=7cm and /PQ/=6cm, Measure the length of the two diagonal .

**Solution** ;The following are the steps taken to construct the Quuadrilateral;

1,Draw one side SR 8cm

2,Construct the given angle 600,I.e, PS^R=600

3,With centre S and a radius of 6cm ,draw an arc to cut SI at P

4, With centre P and radius of PQ 6cm, draw an arc

5,With centre R and radius of 7cm, draw an arc to cut the previous one at Q

6,Join RQ and QP to complete the required Quuadrilateral

I 6cm Q



P



6cm

7cm



S 8cm R

7,Measure the length of the d iagonals QS and PQ

Therefore, /QS)=11cm and /PR/=7.5cm

**ASSIGNMENT**

1,Construct a Quuadrilateral ABCD Such that /AB/=5cm and /BC/=7cm .If /CD/=7cm and parallel to /AB/ and CA^B=300,measure the d iagonals /AC/ and /BD/.

2,Construct a trapezium given that PQ//SR,/PQ/=16cm, /QR/=12cm,/RS/=8cm and PQ^R=300.

3,Using a ruler and a pair of compasses only;

a,Construct a quadrilateral MNOP such that /OP/=11cm, /PM/=6cm, /NO/=5cm, /MN/=8cm and /MO/=9cm.

b,Measure MP^O.

4,Using a ruler and a pair of compasses only,construct AB^C such that /AB/=7cm, /BC/=5cm and AB^C=750.Measure /AC/.