

30/10/2020  
FRIDAY

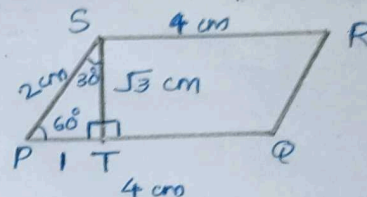
## MATHEMATICS

STD - 8  
class - 51

### Assignment

1) In the following parallelogram find the distance between the top and bottom side. calculate the area of the parallelogram.

Ans) Draw ST from S perpendicular to PQ.  
Angles of  $\Delta SPT$  are  $30^\circ, 60^\circ, 90^\circ$ .  
so its sides are in the ratio  $1 : \sqrt{3} : 2$ .



since  $PS = 2 \text{ cm}$

$$\underline{PT = 1} \text{ and } \underline{ST = \sqrt{3}}$$

Distance between the top and bottom side =  $\sqrt{3} \text{ cm}$

Area of parallelogram PQRS

$$\text{Area} = \underline{4\sqrt{3} \text{ cm}^2}$$

$$= \text{base} \times \text{height}$$

$$= PQ \times ST$$

$$= 4 \times \sqrt{3} = \underline{\underline{4\sqrt{3} \text{ cm}^2}}$$