

NAME: Babatope O.E

SCHOOL: STA

SUBJECT: TECHNICAL DRAWING.

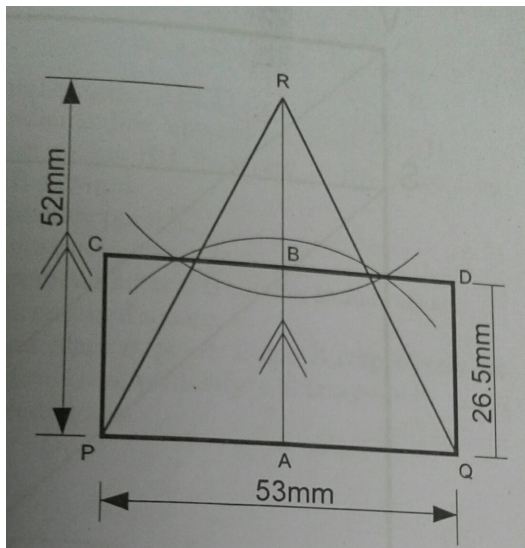
CLASS: SS1.

TOPIC: EQUAL AREAS OF SIMILAR FIGURE.

SUB TOPIC 1: TO CONSTRUCT A RECTANGLE EQUAL IN AREAS TO A GIVEN TRIANGLE.

PROCEDURES

- i. Draw the given triangle PQR.
- ii. Draw perpendicular height RA.
- iii. Bisect RA to give B.
- iv. Draw CD parallel to PQ to pass through point B.
- V. PQCD is the required rectangle. Area PQCD is equal to area PQR.



PROOF

Area of PQCD = Area of PQR

Length x Breadth = $\frac{1}{2} \times \text{base} \times \text{height}$

$$53\text{mm} \times 26\text{mm} = \frac{1}{2} \times 53\text{mm} \times 52\text{mm}$$

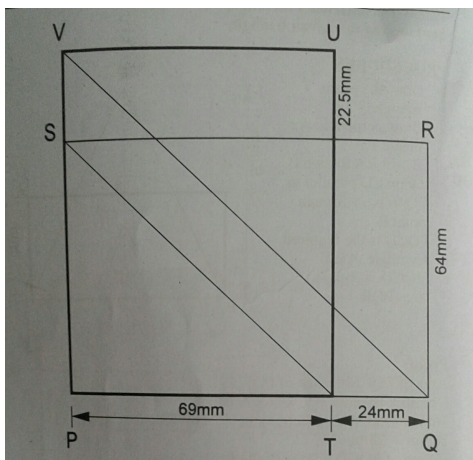
$$=1378\text{mm}^2.$$

\therefore Area of PQCD = Area of PQR.

SUB TOPIC 2: To construct a rectangle of different side but equal in area to a given rectangle.

PROCEDURES

- i. Draw the given rectangle PQRS.
- ii. Mark the required side PT say 69mm.
- iii. Draw ST.
- iv. Further extend P.S..
- PVTU. Draw QV parallel to ST.



vi. PVTU is the required rectangle.