

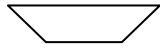
SUBJECT: MATHEMATICS

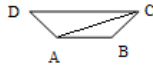
CLASS: IX

CHAPTER NUMBER: 12

CHAPTER NAME: HERON'S FORMULA

EXPERIENTIAL LEARNING ACTIVITY: ROLE PLAY

- Make the students to stand in any Quadrilateral shape . For eg. 
- For finding its area students should divide the quadrilateral into two triangles.



- One of the students should measure the length of AB, BC, AD, DC and AC using tape.
- By applying Heron's formula students will find its area ($\triangle ADC$ and $\triangle ABC$).

$$\text{Heron's Formula} = \sqrt{s(s-a)(s-b)(s-c)} \text{ where } s = \frac{a+b+c}{2}$$

CURIOSITY QUESTIONS:

1. How will you calculate the area of a triangular park if its sides are 40m, 32m and 24m?
2. Suppose that you are buying a land, which is in the shape of a quadrilateral, not in any regular polygon, then how will you find its area?
3. Can you use $\frac{1}{2}b \times h$ formula for finding the area of a scalene triangle?

THINK ABOUT:

- The base of an isosceles triangle is 24cm and its area is 60cm^2 , find its perimeter.(use Heron's formula)
- Sides of the triangle are in the ratio 12:17:25.