

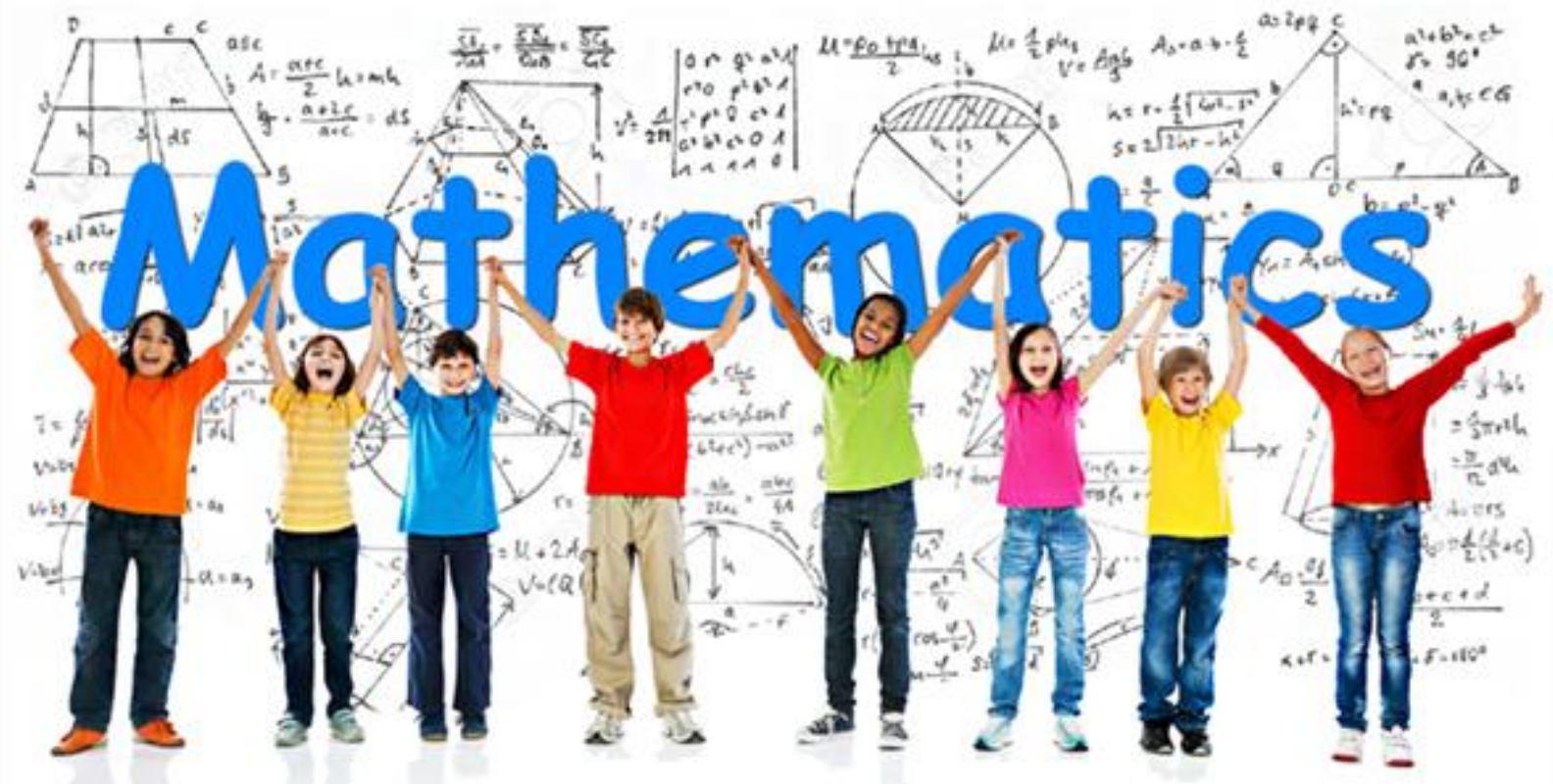
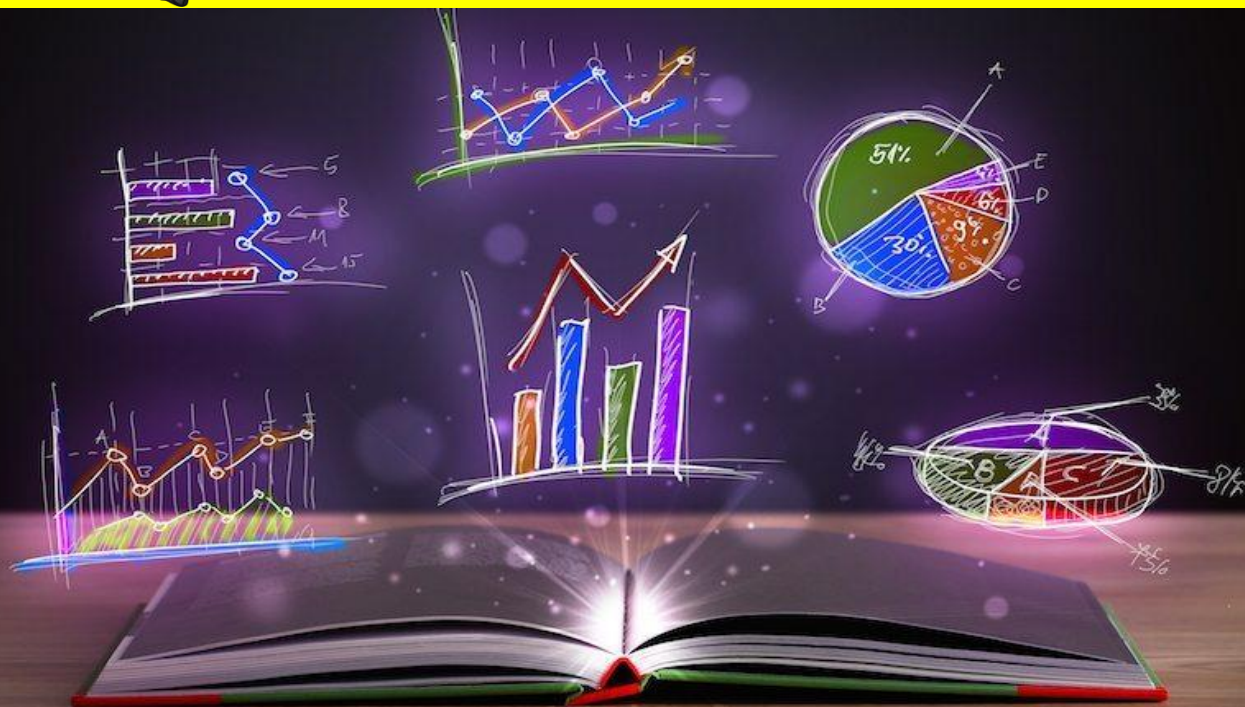
MATHLETE



(अक्सर पूछा करते हैं.....)

Classes - 9th to 10th

Series
1



MATHEMATICAL LITERACY GROUP- CHANDIGARH



Mrs. Pi

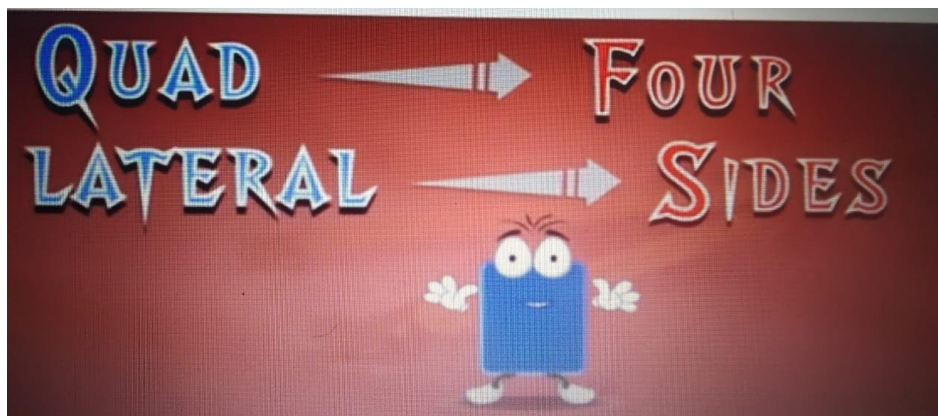
Mr. Snail

Pi : I am Mrs. Pi and this is my assistant Mr. Snail. He is fond of eating.

Snail: What are we going to learn today?

Pi: We are going to discuss about quadrilaterals.

Snail: Oh! Quadiii.....



Pi: Wow! You know about quadrilaterals?

Snail: Only a little bit .

Pi: What are you eating, Mr. Snail?

Snail: This is a Sandwich. I have a Barfi too!



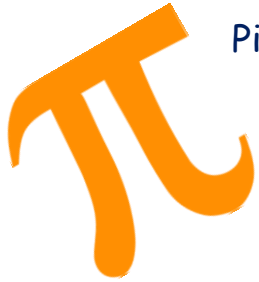
Pi: Can you tell me the shape of the sandwich(as you see from the top)?

Snail: It's a Square, but sometimes I eat Rectangle shaped sandwich too.

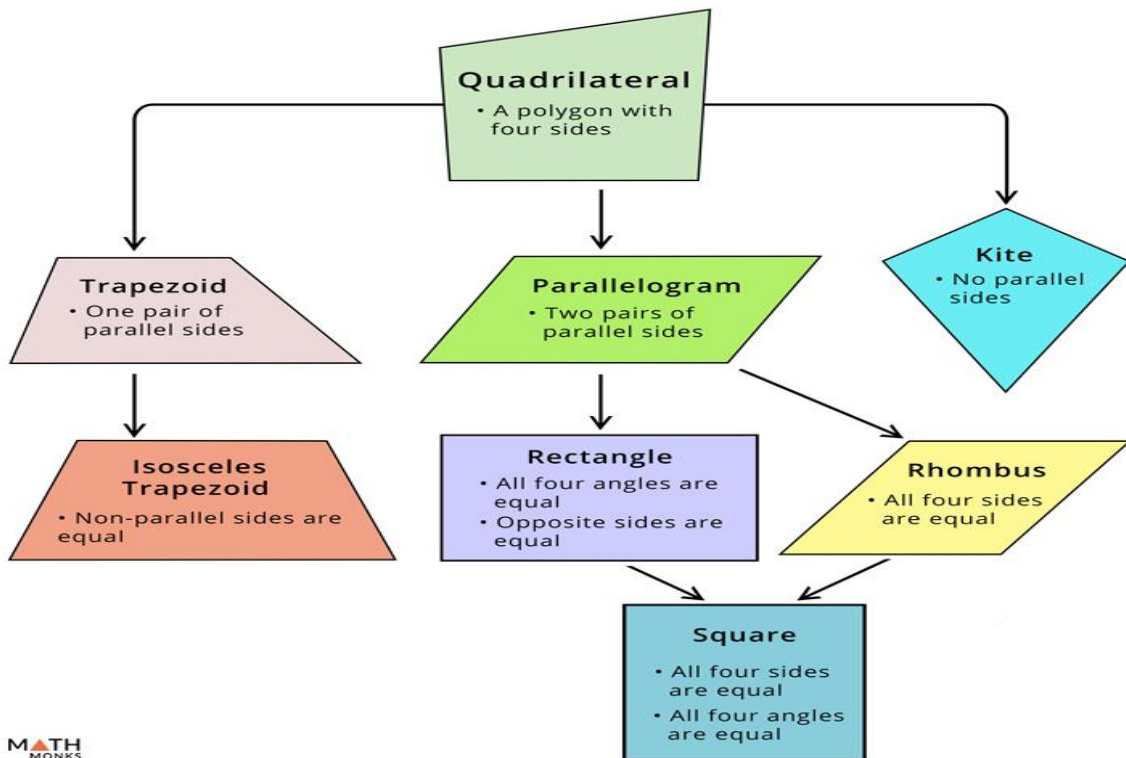
Pi: Can you guess the shape of Barfi?



Pi: Snail, if you want some more information about the shapes,
See the flow chart.



Quadrilateral Flow Chart



MATH
MONKS

Okay! Trapezium
is also called
trapezoid



Pi: Now can you identify the type of quadrilateral whose diagonals bisect each other at 90° ?

Snail: Oh! it's a Square!

Pi: Excellent Mr. Snail. Now tell me... Is Square also a Kite?

Snail: Yes! it is, but a Kite is not a Square.



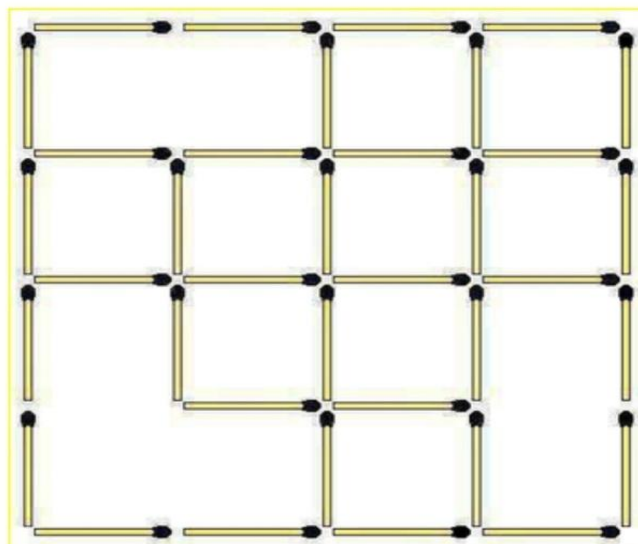
Click on link below to explore more about the properties of quadrilaterals.

<https://drive.google.com/file/d/1N4qnHtyQWYIPoH3Vo7q1c9mkawwfDrGa/view?usp=sharing>

Let's check your knowledge by solving these puzzles

PUZZLE - 1

Can you count the number of squares in this matchstick puzzle below?



PUZZLE - 2

Create your own quadrilaterals robot using the link given below.

https://drive.google.com/file/d/1420bQREgzTqYoTrpfnRiBiOm9aE7_slT/view?usp=sharing



MATH TRIVIA



- ❖ Find all the angles of a rhombus when one angle is 80°
- ❖ Two consecutive angles of a parallelogram are $(x+60)^\circ$ and $(2x+30)^\circ$. What special name can you give to this parallelogram?
- ❖ In a rectangle, one diagonal is inclined to one of its sides at 25° . Find the measure of the acute angle between the two diagonals.
- ❖ What will you call a quadrilateral whose angles are in the ratio 1:2:4:5?

Pi: Mr. Snail, do you know about the golden quadrilateral?

Snail: I have never heard about it. Is it Golden in colour?

Pi: No my Dear, it is a national highway network connecting the four major metro cities of India

Wiz Delhi(north), Kolkata(East), Mumbai(West) and Chennai(south)



Snail: I never expected it to be a national highway network. Thank you for all this information Mrs. Pi!

Pi: Just like Golden Quadrilateral, you can learn about the diamond quadrilateral too.

unilaterals ca



2. Every sport uses quadrilateral concepts in some way or the other.

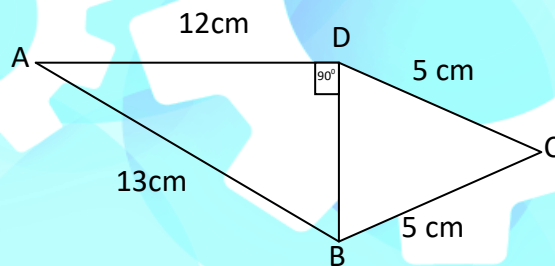


3. Quadrilaterals are preferred in constructing buildings over other polygons as they can make maximum utilization of space.

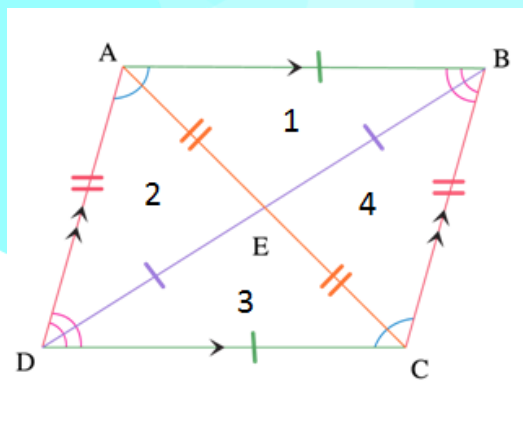


BRAINY SESSION

1. Mr snail has a piece of cake whose top face is as shown in the figure. Mrs Pi asked Mr snail to divide the cake into two parts by joining the diagonal BD. He can eat one part and leave the other for Mr Pi. Now Snail wants to eat the bigger part and he is confused. Can you help him to decide that which part should he take?



2. Mr Snail bought another cake for his family. The figure ABCD represents the structure of the cake which he bought. The cake was cut into 4 pieces for Mr. and Mrs Snail and their 2 kids. Mr. Snail got the first piece, their daughter got the second piece, Mrs. Snail got the third piece and their son got the fourth. Can you identify who would have got equal pieces?



3. He also bought a pack of dhokla (Gujarati delicacy) for the family. The top face of the dhokla is in the shape of a rhombus , whose sides and one of the diagonals are of equal length. Can you find the four interior angles of this rhombus?