**MATHEMATICS PROJECT**

**CLASS: 9B**

**TOPIC: TO PROVE BY PAPERFOLDING METHOD THE POSTULATE OF PYTHAGORAS THEOREM, , WHERE P = Perpendicular or the side opposite to the angle in consideration, B = base or the adjacent side and H = hypotenuse.**

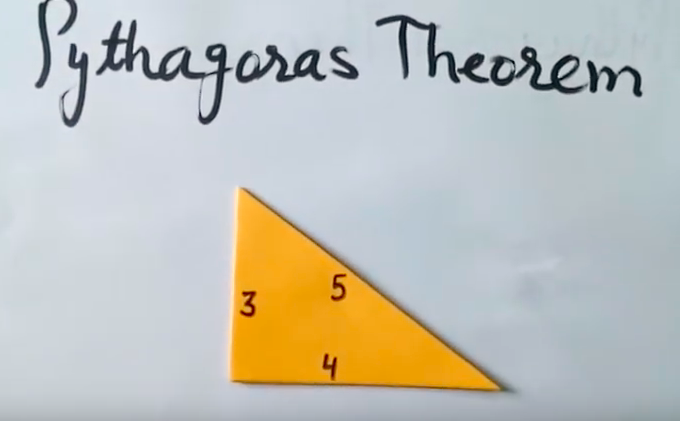
**OBJECTIVE:** To verify Pythagoras Theorem, using methods of paper cutting, pasting and folding.

**MATERIALS REQUIRED:**

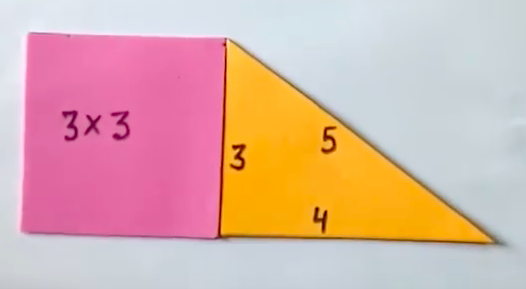
1. Geometry box
2. Practical workbook
3. Coloured chart papers – yellow, light green, pink and orange
4. Scissors
5. Plastic Ruler (15 cm)
6. Sketch pen
7. Adhesives or glue sticks
8. Tracing papers – 2

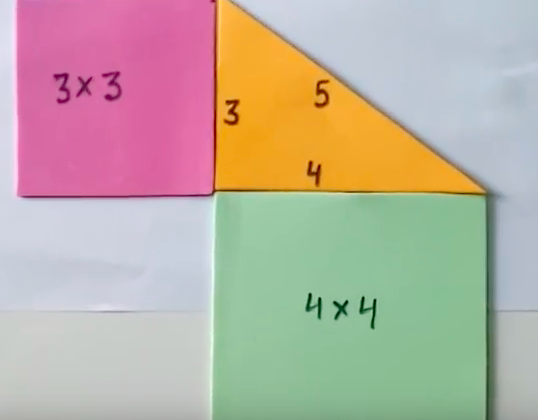
**PROCEDURE:**

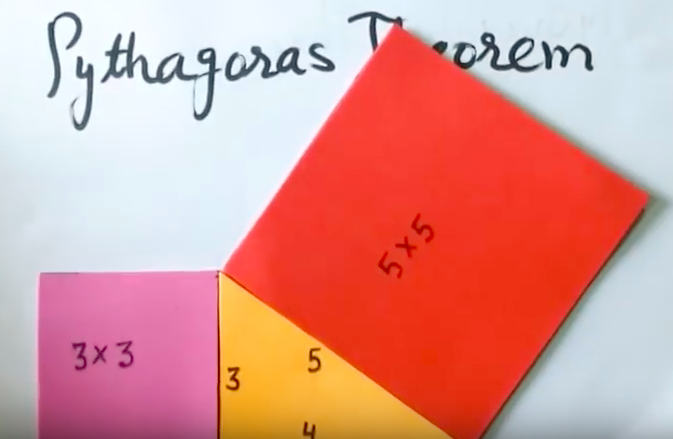
1. Draw a. right angled triangle on a tracing paper with the measurements of P = 3 cm, B = 4 cm, H + 5 cm.
2. Place the tracing paper on top of the yellow chart paper.
3. Trace the triangle and cut it out properly.
4. Check the measurement using Rulers if it is cut out properly.
5. Mark the triangle as shown in the figure.



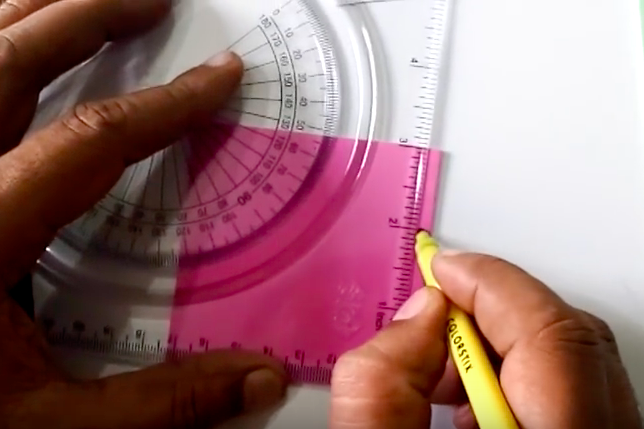
1. Construct a square using compass and ruler of edges 3 cm each on the tracing paper.
2. Pste the yellow triangle at the centre of the white page of your mathematics project file.
3. Cut out two pink squares by placing the tracing paper on the pink chart paper and paste one of it as shown on the white page.
4. Like wise complete the remaining squares as shown.



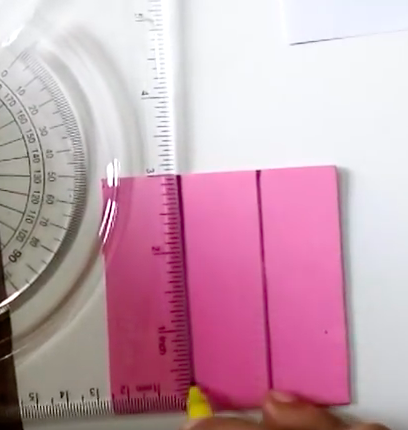


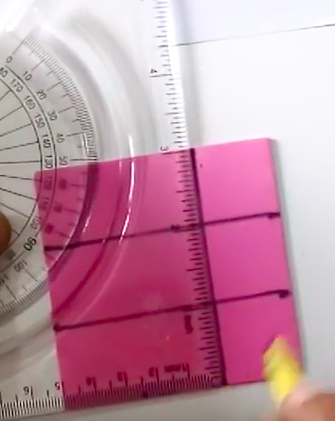


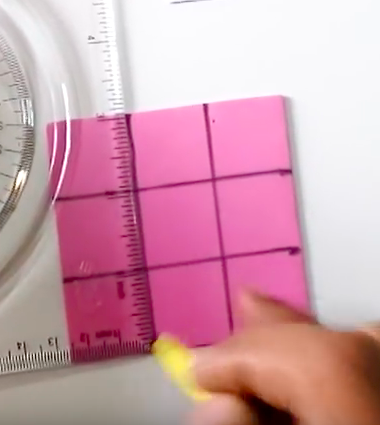
1. Now take the second pink square.
2. Mark three points each of 1 cm width on its two adjacent edges as shown.



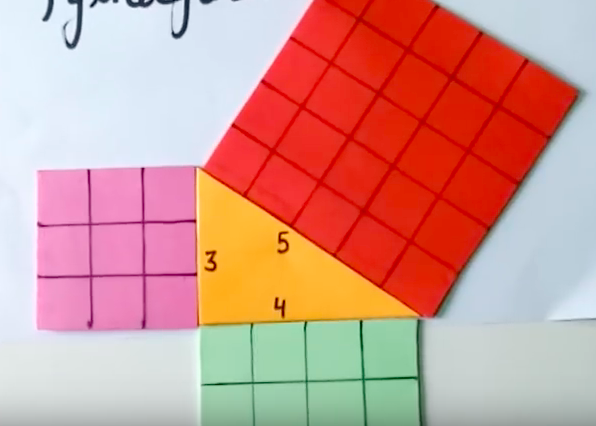
1. Draw lines with black sketch pen as shown on each of the three different squares of red, light blue and red.



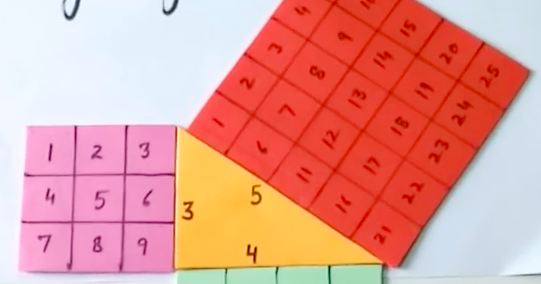


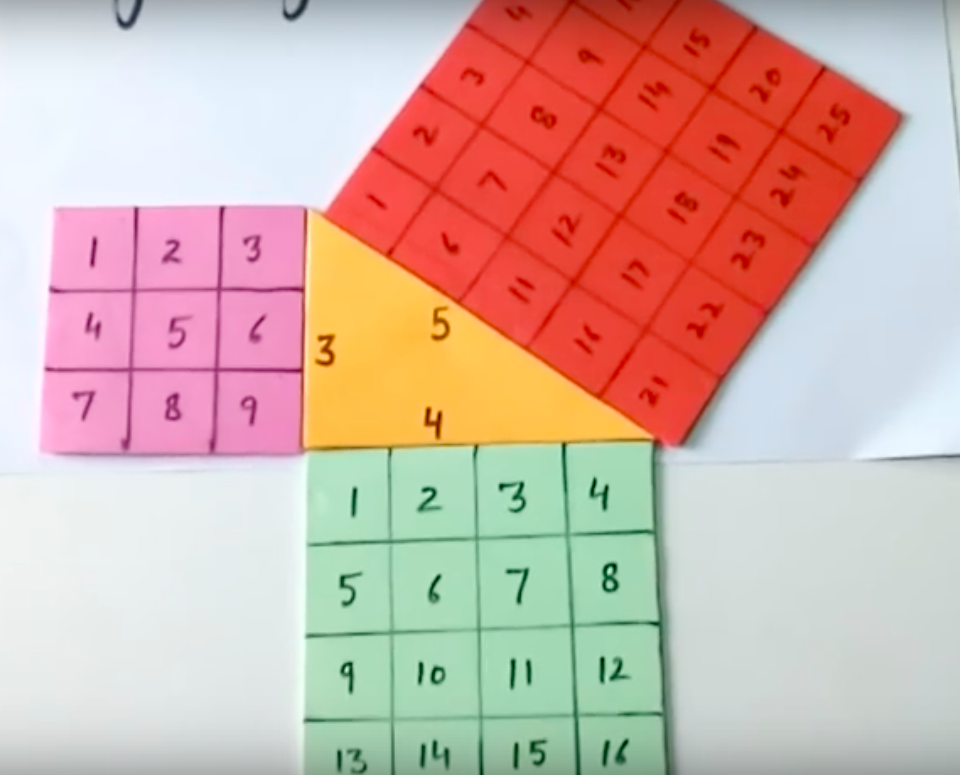


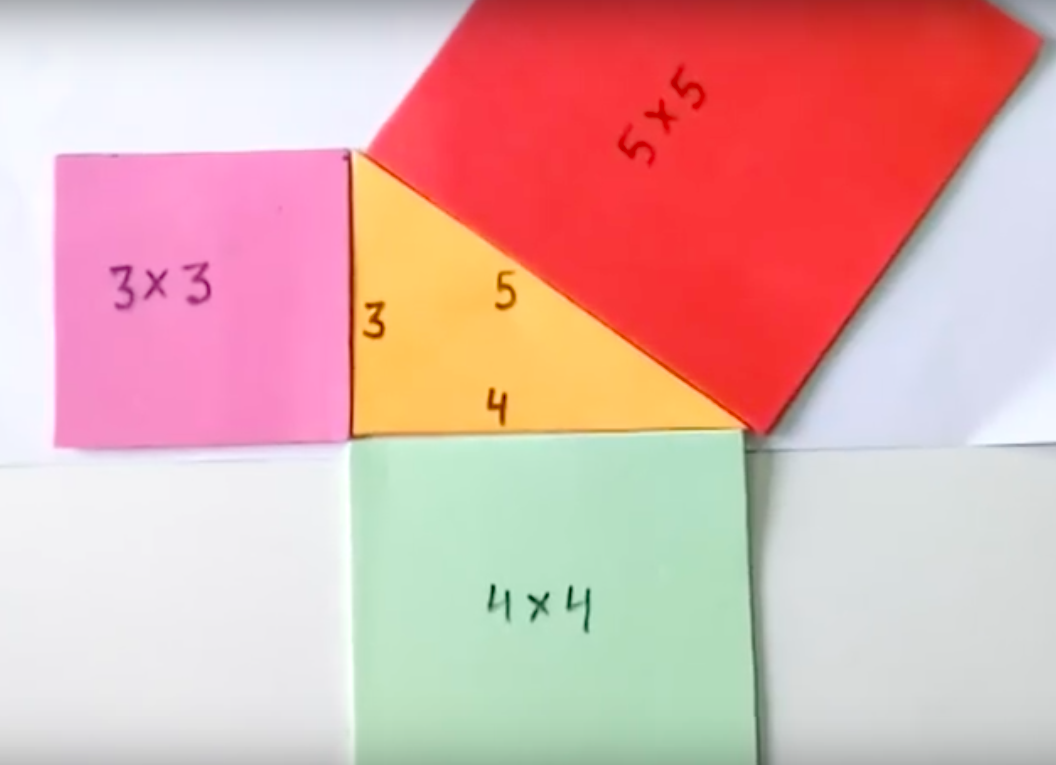
1. Paste the squares as shown.

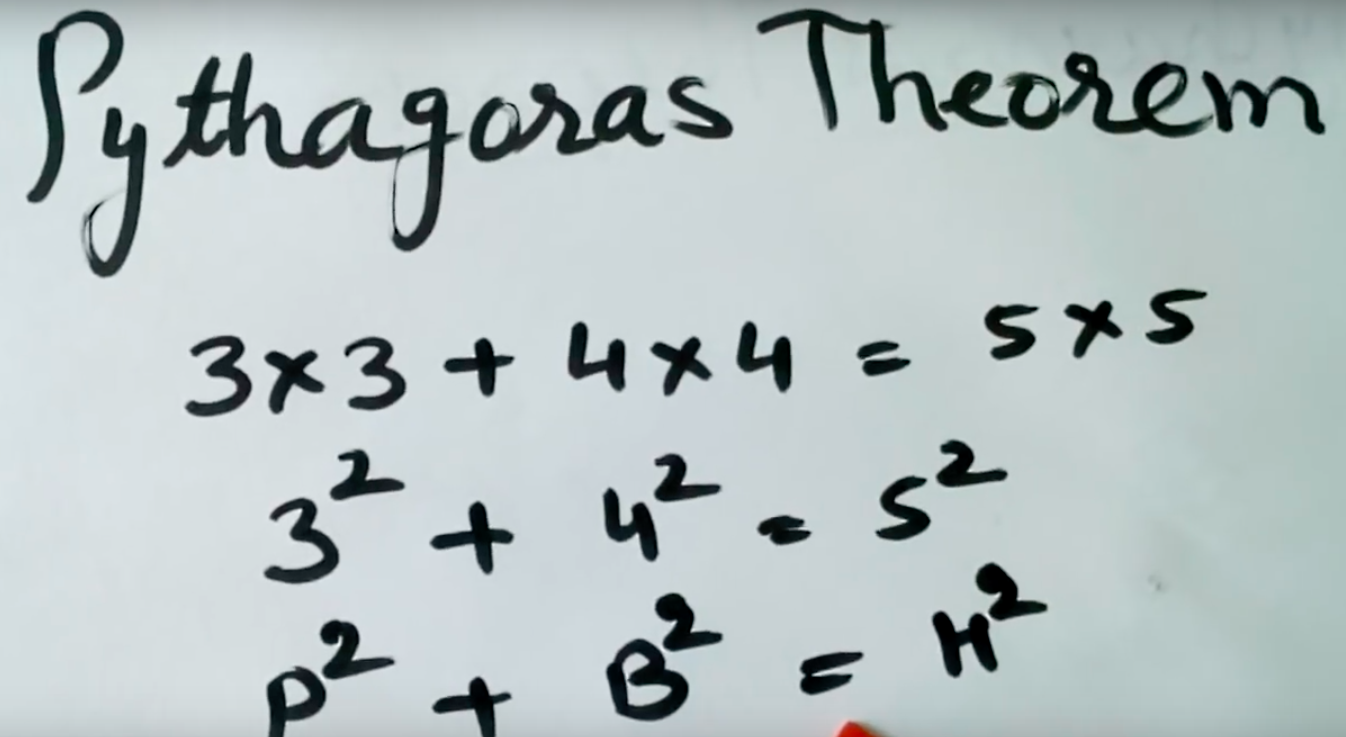


1. Start filling up each small box starting from 1 as shown.
2. You will find the pink square has small boxes written from 1 to 9, green from 1 to 16, red from 1 to 25.
3. Paste them as shown.
4. As square of 3 is 9, 4 is 16 and 5 is 25, we find
5. Hence the Theorem is proved.









**RESULT:**

It is noted that Pythagoras Theorem is hence proved.

**LAST DATE OF SUBMISSION OF PROJECT: 23rd April, 2018.**