Math-Circle: Session 2

TIFR-CAM and ICTS

November 7, 2022

Problem 3. Can you generalize the above problem? For example, imagine that your carom board is of triangular shape similar to a given triangle ABC. Ask the above questions in this setting as well. Investigate by considering different types of triangles ABC.

Note: The part-(b) of the above question for a general triangle ABC is still an open problem till date. This line of investigation is currently a very active area of research. For example, you can consider more general shapes such pentagon, hexagon etc., and ask the same questions. A lot of interesting results have recently been proven about such systems.