

# The Ghosh Point of a Non-Degenerate Triangle

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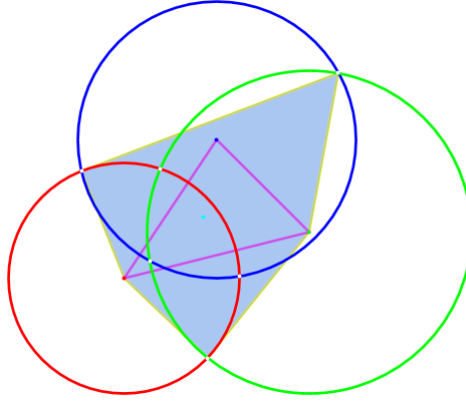
## Abstract

In this paper, I describe the Ghosh point of a triangle.  
The paper ends with “The End”

## Introduction

In this paper, I describe the Ghosh point of a non-degenerate triangle.

## The Ghosh Point of a Non-Degenerate Triangle



The Ghosh Point of a Non-Degenerate Triangle (marked in cyan)

Consider a non-degenerate triangle  $ABC \in \mathbb{R}^n$ .

Draw the circle centered at  $A$ ,  $B$  and  $C$  of radii  $r_A$ ,  $r_B$  and  $r_C$  such that the three circles intersect pair-wise at two points.

Let  $\mathbb{V} = \{A, B, C\}$  and

$\mathbb{I}_{\{r_A, r_B, r_C\}} = \{P : P \text{ is a point of pair-wise intersection of circles } A, B \text{ and } C\}$

Let  $\mathbb{S} = \mathbb{V} \cup \mathbb{I}_{\{r_A, r_B, r_C\}}$

Then  $n(\mathbb{S}) \geq 3$

Let  $\mathbb{H}$  be the convex hull of  $\mathbb{S}$

Then the Ghosh point  $G_{r_A, r_B, r_C}$  of  $ABC$  is given by the centroid of  $\mathbb{H}$

**The End**