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SYNOPSIS

305 Editorial *Shawn Godin*

306 Mathematical Mayhem *Shawn Godin*
Solutions to Mayhem problems M501–M506 are presented.

314 The Contest Corner: No. 8 *Shawn Godin*

316 The Olympiad Corner: No. 306 *Nicolae Strungaru*

316 The Olympiad Corner Problems: OC96–OC100

317 The Olympiad Corner Solutions: OC36–OC40

325 Book Reviews *Amar Sodhi*

325 *La Balade de la Médiane et le Théorème de Pythagore*
par *Jean-Claude Pont*

326 *A Mathematician Comes of Age*
by *Steven G. Krantz*

328 Problem Solver's Toolkit: No. 2 *Shawn Godin*

This new column will focus on theorems and methods that will be useful to problem solvers. The second entry explores counting techniques.

331 Recurring Crux Configurations 8 : *J. Chris Fisher*

In this penultimate entry to a nine part series, problem editor J. Chris Fisher examines problems that have appeared in **Crux** that involve Heronian triangles.

This month's "free sample" is:

3773. *Proposé par Michel Bataille, Rouen, France.*

Soit respectivement R et r les rayons des cercles circonscrit et inscrit d'un triangle de côtés a , b , c . Sous quelle condition sur les angles du triangle l'inégalité

$$a + b + c \leq 2\sqrt{3}(R + r)$$

est-elle respectée?

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3773. *Proposed by Michel Bataille, Rouen, France.*

Let R and r be the circumradius and the inradius of a triangle with sides a , b , c . Under which condition on the angles of the triangle does the inequality

$$a + b + c \leq 2\sqrt{3}(R + r)$$

hold?