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### SYNOPSIS

257 Skoliad: No. 103    *Robert Bilinski*

- Team Questions from the 6<sup>th</sup> Annual CNU Regional Mathematics Cotest (2005)
- Questions d'Équipe du Concours Régional de Mathématiques Secondaire (2005)
- British Columbia Secondary School Mathematics Contest 2006, Senior Final Round, Part B
- solutions to the 2006 Maritime Mathematics Contest

264 Mathematical Mayhem    *Jeff Hooper*

264 Mayhem Problems: M310–M306

267 Mayhem Solutions: M251–M256

272 Problem of the Month    *Ian VanderBurgh*

274 Pólya's Paragon: Greatest Common Divisors    *Ian VanderBurgh*

277 The Olympiad Corner: No. 263    *R.E. Woodrow*

Featuring the Thain Mathematical Olympiad 2003, Selected Problems; the 25<sup>th</sup> Albanian Mathematical Olympiad for High Schools, Tests 1 and 2; the 44<sup>th</sup> Ukrainian Mathematical Olympiad, 11<sup>th</sup> Form, Final Round; and readers' solutions to some of the problems from

- the Belarus Mathematical Olympiad 2003;
- the Problems to Select Indian IMO Team 2003;
- the German Mathematical Olympiad 2003;

292 Book Review    *John Grant McLoughlin*

292 *King of Infinite Space—Donald Coxeter, the Man Who Saved Geometry*

by Siobhan Roberts

Reviewed by Andy Liu

294 On a Theorem of Erdős Concerning Additive Functions

by José Luis Ansorena and Juan Luis Varona

From the abstract:

Erdős proved that every increasing additive function must be a constant multiple of the logarithmic function. We prove a weaker result that assumes that the function is completely additive. In particular, what this paper does show is how wide the gulf is between additive and completely additive functions: proving the result for completely additive functions is very easy, but Erdős's proof for merely additive functions required a formidable effort.

297 Problems: 3221, 3251–3262

This month's "free sample" is:

**3257.** *Proposed by Bill Sands, University of Calgary, Calgary, AB.*

Find the number of ordered pairs  $(A, B)$  of subsets of  $\{1, 2, \dots, 13\}$  such that  $|A \cup B|$  is even.

.....

**3257.** *Proposé par Bill Sands, Université de Calgary, Calgary, AB.*

Trouver le nombre de paires ordonnées  $(A, B)$  de sous-ensembles de  $\{1, 2, \dots, 13\}$  telles que  $|A \cup B|$  soit pair.

302 Solutions: 3102, 3137, 3139, 3151–3163