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- 59 Recurring Crux Configurations 5 :      *J. Chris Fisher*

This new, occasionally appearing column, highlights situations that reappear in *Crux* problems. In this issue problem editor J. Chris Fisher examines cyclic orthodiagonal quadrilaterals.

63 Problems: 3711–3720

This month's "free sample" is:

**3712.** *Proposé par Johan Gunardi, étudiant, SMPK 4 BPK PENABUR, Jakarta, Indonésie.*

Montrer que pour trois nombres réels positifs arbitraires  $a, b, c$ , on a

$$\sqrt{\frac{a(a^2 + bc)}{b + c}} + \sqrt{\frac{b(b^2 + ca)}{c + a}} + \sqrt{\frac{c(c^2 + ab)}{a + b}} \geq a + b + c.$$

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**3712.** *Proposed by Johan Gunardi, student, SMPK 4 BPK PENABUR, Jakarta, Indonesia.*

Prove that for any positive real numbers  $a, b, c$

$$\sqrt{\frac{a(a^2 + bc)}{b + c}} + \sqrt{\frac{b(b^2 + ca)}{c + a}} + \sqrt{\frac{c(c^2 + ab)}{a + b}} \geq a + b + c.$$

68 Solutions: 478, 3611–3620