



# BULLETIN

(NEW SERIES)

*of the*

AMERICAN MATHEMATICAL SOCIETY



**Editors**

*La Grande m'ayant proposé de démontrer*  
*Que le carré d'un triangle quelconque est égal à la somme*  
*des cubes de tous les nombres naturels pris jusqu'à n inclusivement*  
*J'ai trouvé que cette proposition résultoit de l'équation*

**Articles** Susan Friedlander  
**Chief Editor**  
**Book Reviews** Peter Kuchment

$$\left(\frac{n+n}{2}\right)^2 - \left(\frac{n-n}{2}\right)^2 = \frac{n^4 + 2n^3 + n^2}{2} - \frac{n^4 - 2n^3 + n^2}{2}$$

$$= \frac{2n^3 + 2n^3}{2}$$

$$= n^3$$

VOLUME 49

NUMBER 2

APRIL 2012

*J'ai démontré que*  $\left(\frac{n+n}{2}\right)^2 + \left(\frac{n-n}{2}\right)^2 = \frac{n^4 + 2n^3 + n^2}{2} + \frac{n^4 - 2n^3 + n^2}{2}$   
 $= \frac{n^4 + n^2}{2}$   
 Donc  $\Delta^a + \Delta^{a-1} = \square^a$   
 $\square^a + \square^{a-1} = \Delta^a$   
 D'où on tire  $\Delta^a + \Delta^{a-1} + \Delta^a = \square^a + \square^{a-1} + \square^a$

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*Bulletin (New Series) of the American Mathematical Society* (0273-0979) is published quarterly by the American Mathematical Society at 201 Charles Street, Providence, RI 02904-2294 USA. Periodicals postage is paid at Providence, Rhode Island, and additional mailing offices. POSTMASTER: Send address changes to *Bulletin*, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294 USA.

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Printed in the United States of America.

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Bulletin (New Series) of the Amer. Math. Soc.

VOLUME 49

NUMBER 2

PAGES 187–346

APRIL 2012



0273-0979(201204)49:2;1-J