

注意：

允許學生個人、非營利性的圖書館或公立學校合理使用本基金會網站所提供之各項試題及其解答。可直接下載而不須申請。

重版、系統地複製或大量重製這些資料的任何部分，必須獲得財團法人臺北市九章數學教育基金會的授權許可。

申請此項授權請電郵 ccmp@seed.net.tw

Notice:

Individual students, nonprofit libraries, or schools are permitted to make fair use of the papers and its solutions. Republication, systematic copying, or multiple reproduction of any part of this material is permitted only under license from the Chiuchang Mathematics Foundation.

Requests for such permission should be made by e-mailing Mr. Wen-Hsien SUN ccmp@seed.net.tw

2008 小學數學競賽選拔賽初賽試題

第一試：計算題（考試時間 1 小時）

◎請將答案填入答案卷對應題號的空格內，不須計算過程。答案若為分數請化為最簡分數。本題目卷正反面空白處可為作演算草稿紙。每題 5 分，共 100 分

1. $16 \times 16 \times 25 \times 125 = ?$
2. $202 - 204 - 206 + 208 + 210 - 212 - 214 + 216 + \cdots + 2002 - 2004 - 2006 + 2008 = ?$
3. $2008 \times 125 \div (5 \times 5 \times 5 \times 2 + 1) = ?$
4. $5 \times 7 \times 22 \times 39 \times 49 = ?$
5. $48 \times 49 \times 51 \times 52 = ?$
6. $3 \times 3 + 4 \times 4 + 30 \times 30 + 40 \times 40 + 300 \times 300 + 400 \times 400 + 3000 \times 3000 + 4000 \times 4000 + 30000 \times 30000 + 40000 \times 40000 = ?$
7. $19 + 208 + 3007 + 40006 + 500005 + 6000004 + 70000003 + 800000002 + 9000000001 = ?$
8. $12 \times 72 \times 162 \times 432 \div 2 \div 3 \div 4 \div 8 \div 9 \div 16 \div 27 \div 81 = ?$
9. $(3 + 9 + 27 + 81 + \cdots + 59049) \times \frac{2}{3} = ?$
10. $2008 \div 1004 \frac{251}{49} + \frac{(10 \times 10 - 6 \times 6) \div 8}{197} = ?$

（請翻面繼續）

$$11. \frac{30^2 + 40^2}{125 \times 75 - 25 \times 175} = ?$$

$$12. 0.375 \times 64 + 168 \div 700 + 15.2 \div 20 - 0.13 \times 3 - 0.2 \times 1.3 = ?$$

$$13. \frac{1}{2008} + \frac{1}{1004} + \frac{1}{502} + \frac{1}{251} + \frac{1}{8} + \frac{1}{4} + \frac{1}{2} + 1 = ?$$

$$14. 2008 \times \left(1 + \frac{1}{2}\right) \times \left(1 + \frac{1}{3}\right) \times \left(1 + \frac{1}{4}\right) \times \cdots \times \left(1 + \frac{1}{1000}\right) = ?$$

$$15. \left(16 + \frac{7}{20} - \frac{2}{5}\right) \times \left(\frac{1}{2008} + \frac{1}{28}\right) - \left(\frac{1}{2008} + \frac{1}{28}\right) \times \left(15 + \frac{23}{20}\right) + \left(\frac{1}{2008} + \frac{1}{28}\right) \times \left(1 - \frac{4}{5}\right) = ?$$

$$16. \frac{1 + 2 + 3 - 5 + 6 + 7 + 8 - 10 + \cdots + 5001 + 5002 + 5003 - 5005}{7 \times 9 \times 11 \times 13} = ?$$

$$17. \left(2 + \frac{37}{73} \times 512\right) + \left(4 + \frac{37}{73} \times 256\right) + \left(8 + \frac{37}{73} \times 128\right) + \cdots + \left(512 + \frac{37}{73} \times 2\right) = ?$$

$$18. \frac{251}{4 \times 8} + \frac{251}{8 \times 12} + \frac{251}{12 \times 16} + \cdots + \frac{251}{2000 \times 2004} + \frac{251}{2004 \times 2008} = ?$$

$$19. \frac{(80.8 + 0.0\bar{8}) \times 9}{7 \times 11 \times 13} = ?$$

註： $0.0\bar{8}$ 是循環小數，即 $0.0\bar{8} = 0.08888\cdots$ ，下題亦同。

$$20. 0.\overline{142857} + 0.\overline{285714} + 0.\overline{428571} + 0.\overline{571428} + 0.\overline{714285} + 0.\overline{857142} = ?$$