

# 2006 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.  $82 + 93 + 100 + 107 + 218 =$  \_\_\_\_\_

2.  $87 \times 8 + 25 \times 6 + 38 \times 8 + 12 \times 6 =$  \_\_\_\_\_

3.  $7 \times 9 \times 11 \times 13 \times 101 =$  \_\_\_\_\_

4.  $98 \times 102 \times 10004 =$  \_\_\_\_\_

5.  $2006 \times 225 \div 17 - 2006 \times 125 \div 85 =$  \_\_\_\_\_

6.  $1 - 2 + 2 \times 2 - 2 \times 2 \times 2 + 2 \times 2 \times 2 \times 2 - 2 \times 2 \times 2 \times 2 \times 2 + 2 \times 2 \times 2 \times 2 \times 2 \times 2 -$   
 $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 + 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 =$  \_\_\_\_\_

7.  $(2 + 4 + 6 + 8 + \cdots + 2006) - (1 + 3 + 5 + 7 + \cdots + 2005) =$  \_\_\_\_\_

8.  $8 + 88 + 888 + 8888 + 88888 + 888888 + 8888888 + 88888888 +$   
 $888888888 + 8888888888 + 88888888888 =$  \_\_\_\_\_

9.  $\frac{64 \times 64 \times 64 + 36 \times 36 \times 36}{64 \times 64 + 36 \times 36 - 64 \times 36} =$  \_\_\_\_\_

10.  $37\frac{3}{5} \times 48\frac{2}{5} + 62\frac{2}{5} \times 28\frac{2}{5} =$  \_\_\_\_\_

11.  $43.2 \times 8.2 + 5.57 \times 18 + 125 \times 0.12 =$  \_\_\_\_\_

12.  $12.23 + 24.46 \times 0.526 \times \frac{1}{4} + 5.26 \times 0.2446 \times 7.5 - 2.446 \times 2.5 \times 0.526 \times 4 =$  \_\_\_\_\_

(請翻面繼續作答)

$$13. \left(\frac{1}{2} - \frac{1}{6}\right) + \left(\frac{1}{4} - \frac{1}{12}\right) + \left(\frac{1}{14} - \frac{1}{24}\right) + \left(\frac{1}{28} - \frac{1}{48}\right) + \left(\frac{1}{56} - \frac{1}{96}\right) = \underline{\hspace{2cm}}$$

$$14. \left(14\frac{2}{5} + 26\frac{2}{7} + 36\frac{4}{9}\right) \div \left(1\frac{4}{5} + 3\frac{2}{7} + 4\frac{5}{9}\right) = \underline{\hspace{2cm}}$$

$$15. \frac{246369}{321963} \times \frac{231693}{369246} \times \frac{642321}{462693} = \underline{\hspace{2cm}}$$

$$16. \frac{2}{3 + \frac{2}{3 + \frac{2}{3 + \frac{2}{3 + \frac{2}{3}}}}} = \underline{\hspace{2cm}}$$

$$17. 1 + \frac{1}{2} \times \left[ \frac{1}{3} \div \left( \frac{1}{4} - \frac{1}{6} \right) \div \frac{1}{7} \times \frac{1}{8} - \frac{1}{2} \right] = \underline{\hspace{2cm}}$$

$$18. \frac{0.25 + \frac{3}{4} + 9\frac{5}{8} \div 0.875 \times 0.25}{43.75 - 8\frac{1}{3} \times 4\frac{1}{5}} = \underline{\hspace{2cm}}$$

$$19. 10\frac{1}{1024} - 9\frac{1}{512} + 8\frac{1}{256} - 7\frac{1}{128} + 6\frac{1}{64} - 5\frac{1}{32} + 4\frac{1}{16} - 3\frac{1}{8} + 2\frac{1}{4} - 1\frac{1}{2} = \underline{\hspace{2cm}}$$

$$20. \frac{1}{2 \times 4} + \frac{1}{4 \times 6} + \frac{1}{6 \times 8} + \frac{1}{8 \times 10} + \dots + \frac{1}{2002 \times 2004} + \frac{1}{2004 \times 2006} = \underline{\hspace{2cm}}$$