

**Kangaroo of Mathematics 2009**  
**Level Junior (Grades 9 and 10)**  
**Austria - 23.3.2009**



- 3 Points Questions -

1) Which of the following number is divisible by 3?  
**A) 2009**      **B)  $2 + 0 + 0 + 9$**       **C)  $200 - 9$**       **D)  $2^9$**       **E)  $(2 + 0) \cdot (0 + 9)$**

2) What is the minimum number of points which have to be removed from the adjacent diagram so that in the remaining picture no three points lie in one line?  
• • •  
• • •  
• • •  
**A) 1**      **B) 2**      **C) 3**      **D) 4**      **E) 7**

3) 2009 people are taking part in a public fun run. The number of people Hans beat is three times as big as the number of people that have finished before him. In which place did Hans finish the race?  
**A) 503.**      **B) 501.**      **C) 500.**      **D) 1503.**      **E) 1507.**

4) Harry does his paper round in Long Street. He has to deliver one newspaper to each house with an odd number. The first house with an odd number is 15 and the final house has the number 53. How many houses does Harry have to visit?  
**A) 19**      **B) 20**      **C) 27**      **D) 38**      **E) 53**

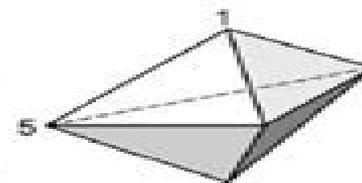
5) The product of four different natural numbers is 100. What is the sum of the four numbers?  
**A) 10**      **B) 12**      **C) 15**      **D) 18**      **E) 20**

6) What is the value of  $\frac{1}{2} \cdot \frac{2}{3} \cdot \frac{3}{4} \cdot \frac{4}{5} \cdot \frac{5}{6} \cdot \frac{6}{7} \cdot \frac{7}{8} \cdot \frac{8}{9} \cdot \frac{9}{10} \cdot 1000$ ?  
**A) 250**      **B) 200**      **C) 100**      **D) 50**      **E) a different number**

7) A long number is build by writing the number 2009, 2009 times in a line. How big is the sum of all odd number within this number that are immediately to the left of an even number?  
**A) 2**      **B) 9**      **C) 4018**      **D) 18072**      **E) 18081**

8) The diagram on the right shows a solid made up of 6 triangles. Each vertex is assigned a number, two of which are indicated. The total of the three numbers on each triangle is the same. What is the total of all five numbers?

**A) 9**      **B) 12**      **C) 17**      **D) 18**      **E) 24**



9) For how many positive whole numbers  $a$  do  $a^2$  and  $a^3$  have the same amount of digits?

**A) 0**      **B) 3**      **C) 4**      **D) 9**      **E) infinite many**

# Kangaroo Maths Test Paper

**DJ Losen**



**Kangaroo Maths Test Paper:**

The book delves into Kangaroo Maths Test Paper. Kangaroo Maths Test Paper is a crucial topic that needs to be grasped by everyone, from students and scholars to the general public. This book will furnish comprehensive and in-depth insights into Kangaroo Maths Test Paper, encompassing both the fundamentals and more intricate discussions.

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  - Chapter 3: Kangaroo Maths Test Paper in Everyday Life
  - Chapter 4: Kangaroo Maths Test Paper in Specific Contexts
  - Chapter 5: Conclusion
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3. In chapter 2, this book will delve into the foundational concepts of Kangaroo Maths Test Paper. The second chapter will elucidate the essential principles that must be understood to grasp Kangaroo Maths Test Paper in its entirety.
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