

1. Write each of your solutions on a separate piece of paper.
2. Write your name, address and the name of your school at the top of each piece of paper you turn in.
3. Explain your solution (even if you can only explain part of it, or have only part of a solution). Answers without explanations will receive no credit.

MANHATTAN MATHEMATICAL OLYMPIAD 2001

Grades 5-6

1. Piglet added together three consecutive whole numbers, then the next three numbers, and multiplied one sum by the other. Could the product be equal to 111,111,111?
2. The dates of three Sundays of a month were even numbers. What day of the week was the 20th of the month?
3. Is it possible to divide 5 apples of the same size equally between six children so that no apple will be cut into more than 3 pieces? (You are allowed to cut an apple into any number of equal pieces).
4. You have a four-liter jug and a six-liter pot (both of cylindrical shape), and a big barrel of water. Can you measure exactly one liter of water?