

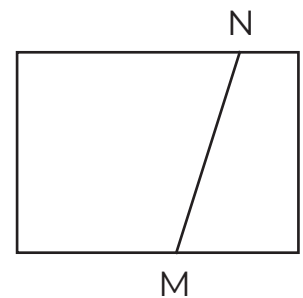
Olympiad - I

Name: _____

1) In the multiplication problem at the right, A and B stand for different digits. Find A and B.

$$\begin{array}{r} A B \\ \times B A \\ \hline 1 1 4 \\ 3 0 4 \\ \hline 3 1 5 4 \end{array}$$

2) In the rectangle at the right, line segment MN separates the rectangle into 2 sections. What is the largest number of sections into which the rectangle can be separated when 4 line segments are drawn through the rectangle?



3) If $\frac{1}{3} = \frac{1}{A} + \frac{1}{B}$ where A and B are different whole numbers, find the value of A and the value of B.

4) P and Q represent numbers, $P * Q$ means $\frac{P + Q}{2}$. What is the value of $3 * (6 * 8)$?