

# A CRYPTORITHM

Each of the letters in the following problem can be replaced by a digit. Each letter represents its own digit. Different letters stand for different digits.

$$\begin{array}{r} \text{M A T H} \\ \times \quad 4 \\ \hline \text{H T A M} \end{array}$$

Use logic (not merely trial and error). Write out your reasoning for each letter. Hint: ***Start with the letter M.***