Cal Poly Department of Mathematics

Puzzle of the Week

Feb 12-18, 2010

Here's another puzzle involving three-digit numbers: For every three-digit number $n = ABC$ define

$$S(n) = A + B + C + (A \times B) + (A \times C) + (B \times C) + (A \times B \times C)$$

Find all (three-digit) numbers n with $S(n) = n$.

Solutions should be submitted to Morgan Sherman:

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before next Friday. Those with correct and complete solutions will have their names listed in next week's email announcement. Anybody is welcome to make a submission.