

Re: New integer multiplication algorithm

Source: <http://sci.tech-archive.net/Archive/sci.math/2005-02/6733.html>

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On a totally different note, this algorithm could be used to test whether a number is a square. If a coded string square root can be found which has all even digits, then replacing the 2's by 1's in that string gives the binary representation for the square root. That should be easy to do with only two choices for each digit. It comes from the fact that the half-difference associated with the factorization $N*N$ is zero. Try it with 9, then with something less obvious like 28,561.

--OL