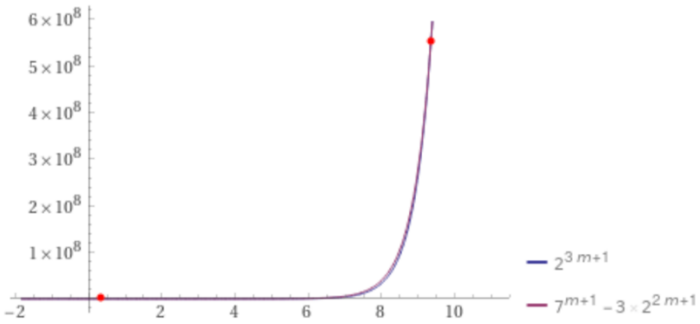
$2^{3m+1} = 7^{m+1} - 6 \times 4^m$

Plot:



Alternate forms:

$2^{2m+1}(2^m + 3) = 7^{m+1}$

$7^{m+1} = 3 \times 2^{2m+1} + 2^{3m+1}$

Number line:

Solutions: Exact forms More digits

$m \approx 0.361502$

$m \approx 9.34737$

Numerical solution: More digits

$m \approx 0.361501983573749\ldots$

- From above since m = 9, then n = 2^m = **512**.

How practical does Strassen's algorithm seem?

The algorithm seems practical for large values of m, which makes n very big.