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## MADHAVA SERIES:

$$\arctan(x) = 1 - \frac{x^3}{3} + \frac{x^5}{5} - \frac{x^7}{7} + \dots$$

let  $x=1$ : 
$$\frac{\pi}{4} = 1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \dots$$

If we use  $n$  terms of the series,  
we get  $m = \log_{10}(n)$  correct digits of  $\pi$ .

Suppose we want  $m=8$  digits.