CH 3 Decimals

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1 Decimals

.11111.... is just a series of $0.1 + .01 + .001...$ which are all fractions
use proof by ordering ¡ ¿ =
pg 23 $1 = 1.0000 = .9999$ (to different decimal expressions)
Periodic decimals are rational $a_0.a_1...a_k\overline{b_1...b_l}$ where the period is the number of digits in a repeating sequence of smallest len
rational $\Rightarrow$ periodic and periodic $\Rightarrow$ rational
Because$\dot{\cdot}$, therefore$\dot{\cdot}$.