

solving CAGR challenge

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I want to rearrange the following formula to solve for R where

$$V = (S * ((1 + R)^{(N+1)} - 1) / (R)) - S.$$

where:

$$S = 10$$

$$V = 39.93375$$

$$N = 3$$

I know the answer is .15.

Essentially, if I compound a starting amount of 10 at a rate of 15% for 3 years, the cumulative sum is 39.93375. How do I solve for the rate if I am given the cumulative sum, the period in years, and the starting amount?

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