## Nontental Street,

Suppose that the height of a rapidly-growing beanstalk on Earth doubles each day, and in 36 days reaches the Moon. The number of days required to reach halfway to the Moon would be

- a) 18 days.
- b) 27 days.
- c) 35 days.
- d) none of these.



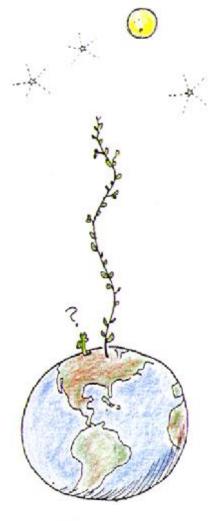


Suppose that the height of a rapidly-growing beanstalk on Earth doubles each day, and in 36 days reaches the Moon. The number of days required to reach halfway to the Moon would be

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- c) 35 days.
- d) none of these.

Answer: c, 35 days

It will take 35 days to reach halfway to the Moon (and one more day to double the distance and reach the Moon)! How many days does it take to reach one-quarter the Earth-Moon distance? The answer is 34 days. And on the 33<sup>rd</sup> day it reached one-eighth the distance to the Moon.



Keep halving, 35 times, and you'll find that the beanstalk was slightly more than 1 cm tall on the first day!



CONCEPTUAL Physics