

POW #16

A SNAIL'S PACE

A snail is crawling up the side of a wall that is 3 meters high. Each day, he crawls up 40 cm. the first night, he slips back down 2 cm; the second night, he slips down 4 cm; the third night, he slips down 6 cm; and so on at the same rate. (He was getting more tired each night!)

How many days did it take the snail to reach the top of the wall?



POW GUIDELINES

Number and label the 4 parts of your write-up.

1. Complete heading

2. Problem Statement.

In your own words, tell what you are asked to do—include the essential details and the question.

3. Process.

Show all your work. Refer to the problem to give reasons for each step. Write enough (several paragraphs) to show that you really tried to solve the problem.

4. Solution.

Write your answer in a sentence which refers to the problem. Explain why your answer makes sense. Show a check if you can.

5. Evaluation.

Write complete sentences to answer these questions:

- How do you feel about this POW? Why?
- Did anyone help you?
- Does this remind you of any other problem?
- Tell one thing you learned.
- What rubric score should you get? Why?

EXTENSIONS. (Extensions are optional) If the POW is easy for you, try the extensions. Write a paragraph for each--the extensions do not require 4-part write-ups.

FIRST EXTENSION: In the POW problem, the snail crawls up 40 cm. each day. Suppose the snail instead crawls up 30 cm. each day. The other details are the same. Did the snail ever get to the top? If so, how long did it take him? If not, explain.

SECOND EXTENSION: Make up a similar problem about a frog at the bottom of a well.