



JAGLAVAK VS TERMITES: WORKING WITH LARGE NUMBERS

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Use the information from the Battle of the Bugs Global Math Story to answer these questions.



1. In Cameroon, there are about 15,000 army ant colonies. Use scientific notation to write how many individual ants can be found in the entire country.
2. A single ant has an area of five square millimeters. How much area does an entire colony trail take up?
3. It takes 15 ants to kill one termite. If a home contains a termite colony with 15,000 termites, how many ants does the chief need to release to get rid of the infestation?
4. Termite colony populations grow exponentially. The chief will get the jaglavak if someone sees 150 termites.
 - a. If a villager counts 4 termites one day, 11 two days later, and 25 four days later, when does the chief need to get the jaglavak?

- b. How many termites will there be 100 days later? Does that make sense? If not, explain what you think happens between days 4 and 100.

- 5. Assume a chief captures 100,000 ants.
 - a. How many ants are left in a colony of 20,000,000?

 - b. Is 100,000 a significant number of ants in relation to the overall colony? Explain your answer.

 - c. What percentage of the colony is the chief taking?

- 6. If the weight of a worker ant is between 1.5 and 9.6 milligrams, would 100,000 ants be too heavy to carry?