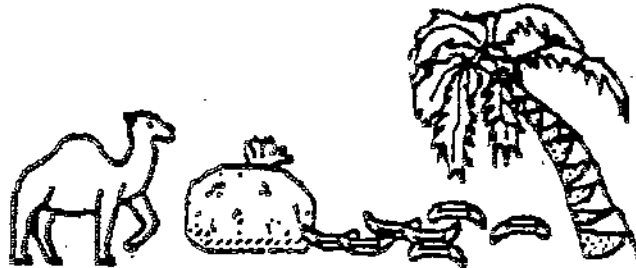


Brain Twisters

Corey Camel



Consider the case of Corey Camel—an enterprising, albeit eccentric, owner of a small banana plantation in a remote desert oasis.

Corey's harvest, worth its weight in gold, consists of 3000 bananas. The market place where the stash can be cashed in is 1000 miles away. However, Corey must walk to the market, and can only carry up to 1000 bananas at a time. Furthermore, being a camel, Corey eats one banana during each and every mile she walks (so Corey can never walk anywhere without bananas).

1. How can Corey get some bananas to the market? Develop a strategy and explain it.
2. Develop a way that Corey can get more bananas to the market.
3. What is the maximum number of bananas that Corey can get to the market? Prove your answer.
4. Find a formula for the maximum number of bananas if the distance is d and Corey can carry x bananas at a time.
5. Find a formula for the maximum number of bananas if the distance to the market is d , Corey can carry x bananas at a time and she must eat y bananas every mile, and she starts with n bananas.