

## Surprise Birthday Party

Sue decided to give Maria a surprise birthday party. She ordered a large ice cream cake for the party, but is not sure how many people to invite.

- A. How will the number of people attending the party affect the portion of cake that each person gets?
  
- B. Is there a relationship between the number of people attending the party and the portion of the cake that each person gets? Explain your answer and illustrate with pictures, a table, and a graph.
  
- C. What is the constant of proportionality and what does it represent in the context of this problem?