

Question 36 is an open-response question.

- **BE SURE TO ANSWER AND LABEL ALL PARTS OF THE QUESTION.**
- **Show all your work (diagrams, tables, or computations) in your Student Answer Booklet.**
- **If you do the work in your head, explain in writing how you did the work.**

Write your answer to question 36 in the space provided in your Student Answer Booklet.

- 36** A chef is making 20 pounds of fruit salad to sell in his shop. The chef will use only grapes and blueberries in the fruit salad.

Let x and y be defined as follows:

- x = the number of pounds of grapes the chef will use
 - y = the number of pounds of blueberries the chef will use
- a. Write an equation in terms of x and y that can be used to represent the total number of pounds of fruit salad the chef will make.

Grapes cost \$2.50 per pound, and blueberries cost \$4.00 per pound. The chef spent a total of \$59.00 for grapes and blueberries for the fruit salad.

- b. Write an equation in terms of x and y that can be used to represent the total cost, in dollars, of the fruit salad.
- c. Use your answers from parts (a) and (b) to determine the number of pounds of grapes **and** the number of pounds of blueberries the chef will use to make the fruit salad. Show or explain how you got your answer.