

Lilies and Daisies

Lesson:

Engage students in content.

Elaine is planning a 40th birthday party for her mother. She has a maximum of \$50 to spend on flowers. Her mother's favorite flowers are lilies and daisies. How many of each could Elaine order if lilies cost \$0.50 each and daisies cost \$0.30 each?

1. Write an inequality to show the number of lilies (x) and daisies (y) Elaine could order staying under her \$50 limit.

Inequality: _____

2. Solve the inequality for y and then enter the inequality into your graphing calculator.

Teacher Tips:

Calculators vary in the way in which inequalities are graphed. You will need to read the manual of the model of calculator available to you and your students to assist them in graphing linear inequalities. This activity can be done without the aid of a graphing calculator; however using technology on the High School Assessment is encouraged.

3. List 3 possible combinations of lilies and daisies Elaine could order for her mother's 40th birthday party.
4. How many lilies could Elaine order if she decided not to include daisies in the flower arrangements? Use mathematics to explain how you determined your answer. Use words, symbols, or both in your explanation.

Teacher Tip:

Have the students find a zero for the inequality or they could use the trace function of the calculator.

5. How many daisies could Elaine order if she decided not to include lilies in the flower arrangements? Use mathematics to explain how you determined your answer. Use words, symbols, or both in your explanation.

Teacher Tip:

To find this value, students may find the corresponding y value when letting x be zero or may use the trace function of the calculator.