

Lilies and Daisies

Student Worksheet:

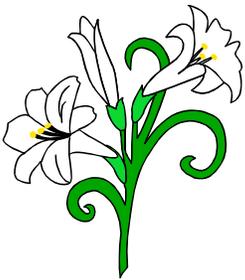
Elaine is planning a 40th birthday party for her mother. She has a maximum of \$50 to spend on flowers. Her mother's favorite flowers are lilies and daisies. How many of each could Elaine order if lilies cost \$0.50 each and daisies cost \$0.30 each?



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.
3. List three possible combinations of lilies and daisies Elaine could order for her mother's 40th birthday party.
4. If Elaine decided on only lilies, how many lilies could she order staying within her flower budget? Use mathematics to explain how you determined your answer. Use words, symbols, or both in your explanation.
5. If Elaine decided on only daisies, how many daisies could she order staying within her flower budget? Use mathematics to explain how you determined your answer. Use words, symbols, or both in your explanation.



Lilies and Daisies Answer Key

1. $0.5x + 0.3y \leq 50$

2. $y = (-5/3)x + (500/3)$

3. Student answers will vary. Examples: (32, 75), (45, 50), (30, 100)

4. 100 lilies

Example explanation: I found the x-intercept of the graph.

5. 166 daisies

Example explanation: $.5(0) + .3y = 50$

$.3y = 50$

$y = 166.6667$

$y = 166$ daisies