

Name: _____

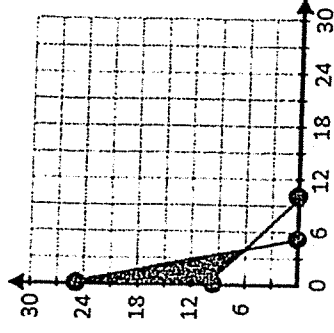
Word Problem:

Defined Variables:

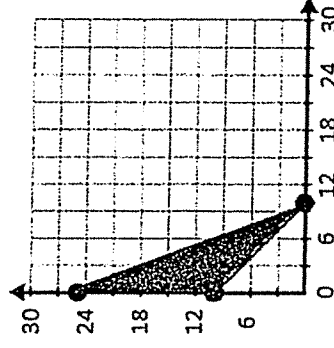
Inequalities:

Graph:

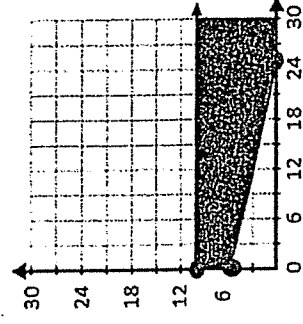
Elyset is buying necklaces and bracelets for her friends. Bracelets cost \$2 and necklaces cost \$10. She wants to buy at least 10 items, but cannot spend more than \$50. How many of each item can she buy? Determine the possibilities.



In a board game, you score 5 points for picking a blue card and 2 points for picking an orange card. You have picked at least 10 cards and have earned less than or equal to 50 points. Determine the possibilities of orange and blue cards picked.



Halle is selling small and giant candy bars. She has at most 10 giant candy bars to sell. She needs to earn at least \$50. The small candy bar costs \$2 and the large candy bar costs \$10. How many of each size should she sell? Determine the possibilities.



Real-Life Systems of Linear Inequalities Puzzle

Name: _____

Directions: Read each of the word problems below and find the appropriate puzzle pieces to match each problem.

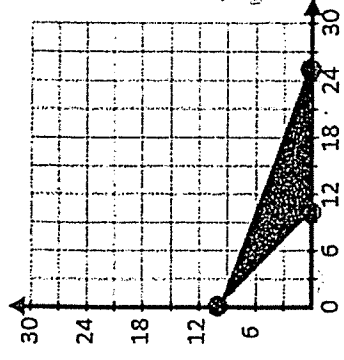
Word Problem:

defined Variables:

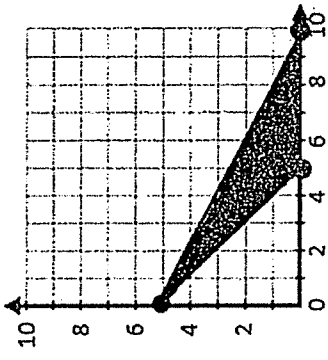
inequalities:

Graph:

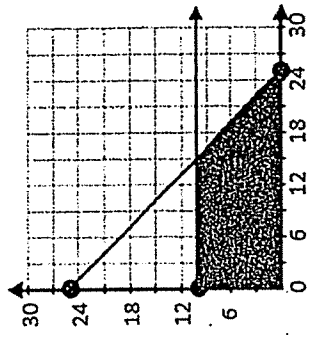
Jamee is purchasing daffodils for her new flower garden. She needs at least 10 different plants. The daffodils cost \$2 each and the lilies cost \$5 each. Jamee plans to spend no more than \$50. How many of each type of flower can she buy? Determine the possibilities.



The sum of two numbers is at least 5, and the sum of the first number and 2 times the second number is at most 10. What are the possible numbers?



Peter needs to build a fence around his small garden. The length of the fence can be no more than 10 ft., and he has 50 ft. of fencing that he can use. What are the possible dimensions of his garden?



x = width of garden

y = length of garden

$$5x + 2y \leq 50$$

$$x + y \geq 10$$

x = ^{# of} necklaces

y = ^{# of} bracelets

$$2x + 2y \leq 50$$

$$y \leq 10$$

x = ^{# of} daffodils

y = ^{# of} lilies

$$x + y \geq 5$$

$$x + 2y \leq 10$$

$$0 \leq x + x$$

$$50 \leq 6x + 2x + 10$$

x = first number

y = second number

$$0 \leq x$$

$$10y \geq 50$$

x = ^{# of} orange cards

y = ^{# of} blue cards

$$x = x$$

$$10 \geq x + x$$

$$2x + 5y \leq 50$$

y = ^{# of} giant candy bars

x = ^{# of} small candy bars

