Directions: ① Draw lines on each system.

#3-8, Show work on notebook paper.

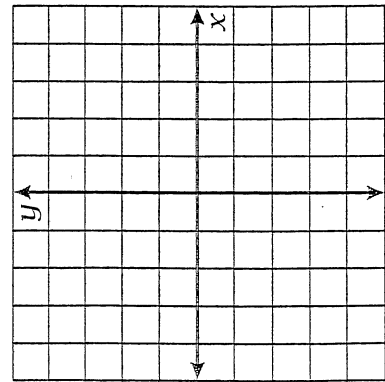#1-8, check all solutions on notebook paper

What Did the Teacher Do With Ogar's Cheese Report?

Solve each system of equations by graphing. Cross out the letters above each correct answer. When you finish, the remaining letters will tell you the answer to the title question.
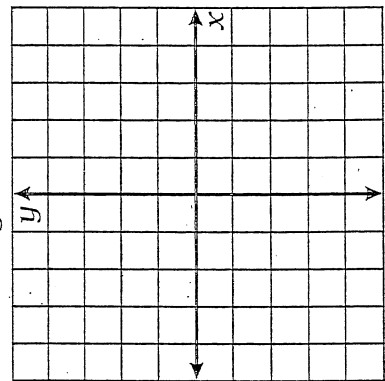
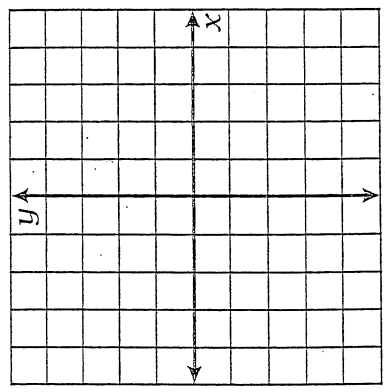**1.** $y = \frac{3}{2}x - 1$

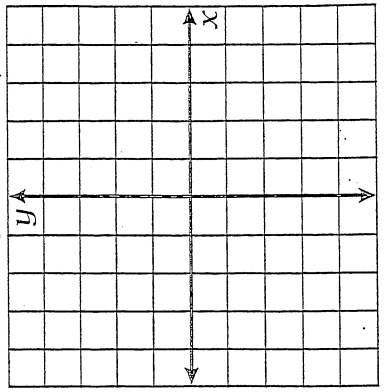$y = -x + 4$

2. $y = \frac{1}{3}x + 2$

$y = -\frac{4}{3}x - 3$
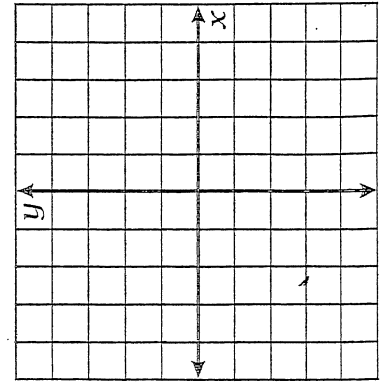
3. $y = 2x + 1$

$-2x + 3y = -9$

4. $3x + y = 0$
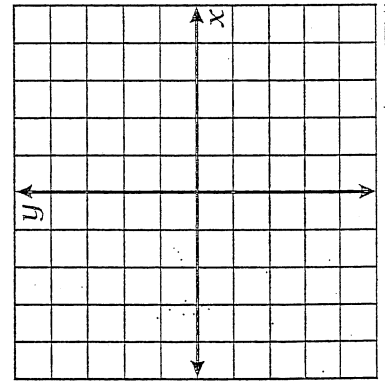
$x - y = 4$

5. $-3x + 4y = 8$
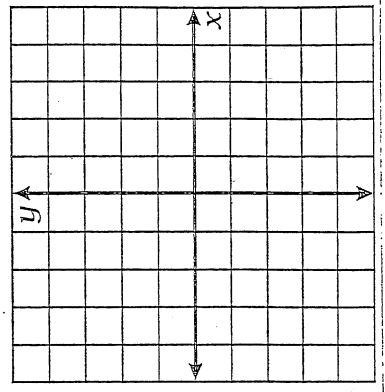
$x + 2y + 6 = 0$

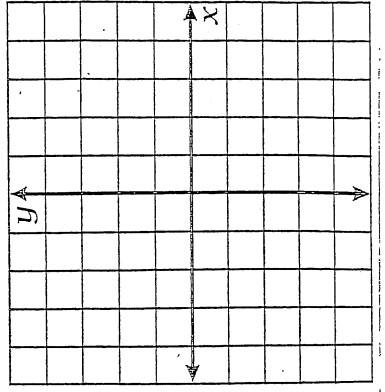**6.** $7x - 5y = 20$

$-8x - 3y = 12$

7. $-x - 4y = 12$

$20x + 80y = 0$

8. $30x + 50y - 100 = 0$

$3x - 15y - 30 = 0$

SOLVING PROBLEMS WITH GRAPHS

Solve each problem by writing and graphing a system of equations that models the situation.

Situation 1. ROCKET RIDE.

The Rocket Coaster has 10 cars, some that hold 4 people and some that hold 8 people. There is room for 56 people altogether. How many 4-passenger cars are there? How many 8-passenger cars are there?
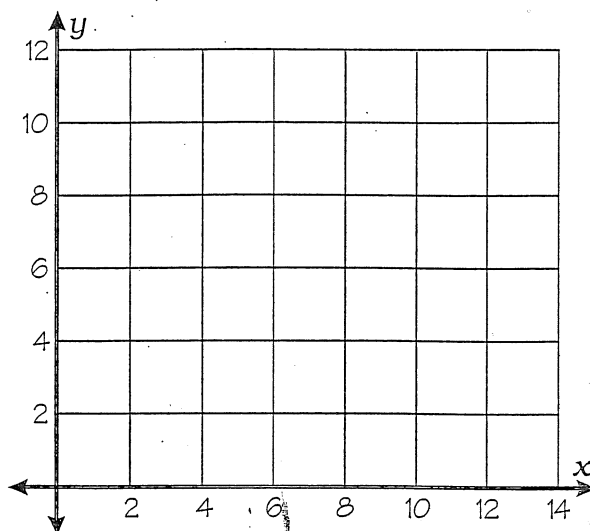
    Let x = number of 4-passenger cars

    Let y = number of 8-passenger cars

    equation #1:_____

    equation #2:_____

    Solution:_____

Situation 2. FUN, FUN, FUN.

The cost of admission to Funland Park was $70 for a group of 2 adults and 5 children. The admission was $84 for another group of 4 adults and 3 children. Find the admission price for each adult and each child.
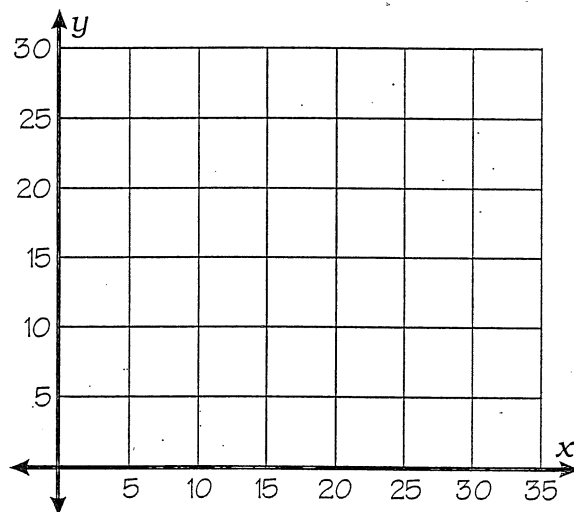
    Let x = price of an adult's admission

    Let y = price of a child's admission

    equation #1:_____

    equation #2:_____

    Solution:_____

Situation 3. HOW ABOUT A KISS?

The number of calories in a chocolate kiss is 20 less than the number of calories in a caramel cluster. Three kisses plus four clusters together have 360 calories. How many calories are in each?

    Let x = calories in a chocolate kiss

    Let y = calories in a caramel cluster

    equation #1:_____

    equation #2:_____

    Solution:_____