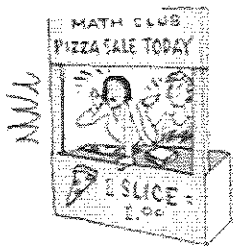
Name _____ Hour: _____

Homework:

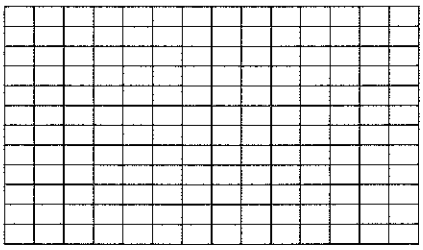
5-36. It is the end of the semester, and the clubs at school are recording their profits. The *Science Club* started out with $20 and has increased its balance by an average of **$10 per week**. The *Math Club* has saved **$5 per week** after starting out with $50 at the beginning of the semester.



a. Create an equation for each club. Let x represent the number of weeks and y represent the balance of the club's account.

Math Club - _____

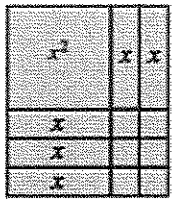
Science Club - _____



b. Graph both lines on one set of axes. When do the clubs have the same balance?

c. What is the balance at that point?

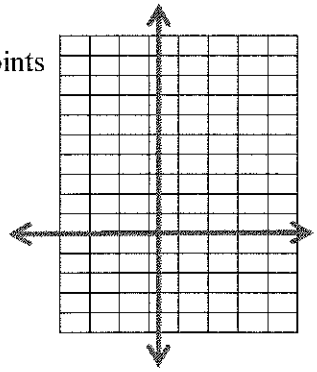
5-37. Examine the rectangle formed with algebra tiles at right.



a. Find the area of the entire rectangle. That is, what is the sum of the areas of the algebra tiles?

b. Find the perimeter of the entire rectangle. Show all work.

5-38. On graph paper, plot the points $(-3, 7)$ and $(2, -3)$ and draw a line through them. Then name the x- and y- intercepts of the line.



5-39. A local restaurant offers a Dim Sum lunch special that includes two dumplings, three egg rolls, a sweet bun, and a drink. Susan and her friends ordered four Dim Sum lunch specials How many of each item should they receive?

5-40. Solve for x and check your answer.

a. $\frac{x}{4}+\frac{x}{6}=5$ CHECK:

b. $\frac{x}{3}+\frac{x-1}{4}=2+x$ CHECK: