Algebra I - Midterm Review (Day 2)

Do Now:

1) Bill spent less than $26 on a magazine and some composition books. The magazine cost $4 and each composition book costs $2.50.

   a) Write an inequality to find the maximum number of composition books that can be purchased. Be sure to define your variable.

x: number of composition books

$4 + 2.5x < 26$

   b) Solve the inequality. How many composition books can be purchased?

$$4 + 2.5x < 26$$
$$2.5x < 22$$
$$x < 8.8$$

At most, 8 books can be purchased.

2) Samantha purchased some red candies and green candies in the ratio of 3:4. The red candies cost $0.50 per ounce and the green candies cost $0.25 per ounce. If the total price of the bag of mixed red and green candies cost $10.00, how many ounces of each type of candy did Samantha purchase?

3x: ounces of red candies = 3(4) = 12 ounces

4x: ounces of green candies = 4(4) = 16 ounces

$$.5(3x) + .25(4x) = 10$$
$$1.5x + x = 10$$
$$2.5x = 10$$
$$x = 4$$