

Alg 2 Support CW

Easy Does It! From IMP 3

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Consider this question.

*Will bought 4 packages of batteries and 1 package of blank tapes for \$20.00. Tania bought 5 packages of batteries and 1 package of blank tapes for \$23.00. How much does a package of batteries cost?*

You can probably answer this question without using equations, given that Will and Tania made almost the same purchases. But write down a pair of equations anyway, and explain how your intuitive reasoning about the problem could be expressed in terms of the equations.

2. Here is a similar question.

*Jennie bought 4 pens and 3 pencils for \$3.75. Tanisha bought 4 pens and 6 pencils for \$4.50. How much does a pencil cost and how much does a pen cost?*

Again, you can probably answer this question without using equations, but write down a pair of equations anyway, and explain how your intuitive reasoning about the problem could be expressed in terms of the equations.

3. This problem is not quite as easy as Question 2, but the same sort of approach works fairly well.

*Sanji bought 5 pears and 3 apples for \$1.75. Ursula bought 10 pears and 7 apples for \$3.80. How much does an apple cost?*

Again, write down a pair of equations that express the situation, and explain how your intuitive reasoning about the problem could be expressed in terms of the equations.

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# Get Rid of Those Variables!

Read the situation described here and then move on to the questions. The situation probably sounds similar to the problems in *Homework 17: Easy Does It!*, but be sure to follow the instructions carefully after you read the initial information.

*Erin bought 3 gallons of juice and  
7 pounds of carrots and spent \$4.80.*

*Jinho bought 5 gallons of juice and  
6 pounds of carrots and spent \$6.30.*

1. Represent the information in the situation as a pair of linear equations.
2.
  - a. Generate a list of at least ten more combinations of purchases whose cost is easy to figure out from the combinations you are given in this problem. (But don't figure out the price of a gallon of juice or a pound of carrots yet.)
  - b. Represent each of the combinations from your list, with its cost, using an equation.
3. After you have created the list of equations in Question 2b, find a pair of equations in your list that makes it easy to see what the price of a gallon of juice or a pound of carrots is. Explain how to find these prices from your pair of equations.

(If you don't find such a pair, create some more combinations, until getting the individual prices is as simple as it was on *Homework 17: Easy Does It!*)