Problem Solving: Multiple-Step Problems

A multiple-step problem is a problem where you may need more than one step to find your answer.

Marcie was in a 3-day charity walk. Her friend Gayle said she would give the charity $1.50 for each mile that Marcie walked. The first day, Marcie walked 26.42 miles. The second day, Marcie walked 32.37 miles. The third day, Marcie walked 28.93 miles. How much money did Gayle give?

Step 1. Read through the problem again and write a list of what you already know.

Marcie walked 26.42, 32.37, and 28.93 miles.
Gayle gave $1.50 for each mile.

Step 2. Write a list of what you *need* to know.

Total amount Gayle gave

Step 3. Write a list of the steps to solve the problem.

Find the total number of miles Marcie walked.
Find the amount Gayle gave.

Step 4. Solve the problem one step at a time.

$26.42 + 32.37 + 28.93 = 87.72$ *total number of miles Marcie walked*

$87.72 \times \$1.50 = \$131.58$ *total amount Gayle gave*

Use the information above to answer Exercise **1**.

1. Marcie's brother Tom was also in the charity walk. He only walked 0.8 as far as Marcie on the first day, 0.7 as far on the second day, and 0.9 as far on the third day. How many miles did Tom walk, rounded to the nearest hundredth of a mile?

   _____

2. Diego is buying fruit at the store. Which costs less: 1 pound of each fruit or 4 pounds of peaches?

   _____

Fruit	Cost per pound
Apples	$0.89
Oranges	$1.29
Peaches	$0.99
Grapes	$1.09

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Write and answer the hidden question or questions
in each problem and then solve the problem.
Write your answer in a complete sentence.

Storewide Sale	
Jeans	$29.95 for 1 pair OR 2 pairs for $55.00
T-shirts	$9.95 for 1 OR 3 T-shirts for $25.00

1. Sue bought 2 pairs of jeans and a belt that
   cost $6.95. The tax on the items was $5.85.
   Sue paid the cashier $70.00. How much money
   did Sue receive in change?

   _____

2. A recreation department purchased 12 T-shirts for day camp.
   The department does not have to pay sales tax. It paid with a
   $100.00 bill. How much change did it receive?

   _____

   _____

3. When Mrs. Johnson saw the sale, she decided to get clothes
   for each child in her family. She bought each of her 6 children
   a pair of jeans and a T-shirt. She paid $14.35 in sales tax.
   How much was Mrs. Johnson's total bill?

   A $94.35   **B** $119.70   **C** $229.35   **D** $253.35

4. Write a two-step problem that contains a hidden question about
   buying something at the mall. Tell what the hidden question is and
   solve your problem. Use $8.95 somewhere in your equation. Write
   your answer in a complete sentence.

   _____

5. What are hidden questions and why are they important when
   solving multiple-step problems?

   _____

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