



Learning Project **6** Fractions, Proportions and Percents

Inquiry Activity 6-6: More Multi-step Problems and Percents

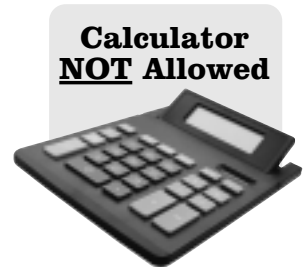
(Note: The italicized portion is directed to the learners.)

1. Identifying the Problem (Item # 23, PA) Calculator not allowed.

Read the question carefully, as you would if taking the actual test.

23. Julio invested a sum of money at 6% interest. Krista invested \$200 less than Julio, but her bank paid her 9% interest. After one year, what was the DIFFERENCE between the amount of interest Krista had earned and the amount of interest Julio had earned?

- (1) \$ 6.00
- (2) \$ 12.00
- (3) \$ 18.00
- (4) \$ 200.00
- (5) Not enough information is given



Here are some problem clarification questions you may want to consider when reading test questions.

What words and/or symbols might be important to understand to answer this problem and what are they telling you?

The following, among others, are possibilities: invested, difference.

What words and/or symbols are unfamiliar and what do you think they mean?

2. Becoming Familiar with the Problem

Ask yourself questions like these about the problem, taking note of the ones that were especially helpful so that you can remember to use them when you take the test.

Reread the question. What is the problem really asking?

Which information in the problem is relevant to what you need to find?

What do you know about savings accounts and interest?

How many math steps might there be to solve this problem?

3. Planning, Assigning and Performing Tasks

Try to answer the test question any way you can, even if you have to guess, but be aware of the reasoning and operations that you are using. The following directions and questions can be helpful.

Use your experience with similar problems to make sense of this one.

Restate the problem using fewer words.

What math operations are involved with interest?

Break the problem down into parts.

Estimate an answer and be aware of the steps you used to estimate.

Do the work to find an answer.

Review the answer choices.

Eliminate unreasonable answer choices.

Choose an answer.

Be ready to defend your answer (whether you worked individually or with someone else) and the way you found it.

4. Sharing with Others: Class Discussion of Results

Telling other people what you know helps you to understand the material better. Take this opportunity not only to share your knowledge, but also to learn it more completely.

Small groups: Compare your answer to others in the group and explain why and how you found it and why you think it is correct.

Agree on how the problem can be broken down into smaller, more manageable steps.

Discuss how you proceed in answering a test question when one of the answer choices “not enough information is given” and agree on a procedure.

Determine how you will use the multiple-choice answer “Not enough information given” in your estimation process and then estimate the answer before doing any computing. Be prepared to list and support the steps used in the estimation process.

Whole Class: Report to the class how you decided on the steps to answer this question, how you handled the estimation process, how you handled the answer choice “Not enough information given,” and any other subject brought up during the small group discussion.

5. Reflecting, Extending and Evaluating

Reflecting: Think about what you learned.

Here are some questions to start you thinking about the experience you just had. Thinking about what you have learned and experienced is part of the learning process. When the focus is only on the answer, you don't get much time to think about what was learned.

What new insights about multi-step math problems have you gained from all the Inquiry Activities in this Learning Project on Proportions and Percents?

What test-taking strategy do you use when one of your answer choices is “Not enough information given”?

Explain how you use thinking, reading, and computational skills in problems when one of the answer choices is “Not enough information given.”

Extending: Extend what you learned to new situations.

In extending, you are being asked to transfer the information presented in the Practice Test question to other information or situations you already know about and maybe make new connections to other information.

What information, not supplied, do you need to be able to come up with an answer in dollars?

Supply a number for the amount of money that Julio invested and solve the problem.

Find in the textbooks the section where it is explained how to solve this kind of percent problem (if all the numbers had been originally supplied) and discuss the explanation.

Make up similar problems using percents and pass them to other class members to solve.



Evaluating: *Assess what you learned and how you learned it.*

In this last step, you get a chance to review both the content of what you learned and the methods used to learn. There are no right or wrong answers to these questions; it is your chance to look more closely at your learning style and the opportunity to state how you benefited or didn't benefit from the content and/or the methods to help you pass the GED test.

If you had math anxiety before starting the first Learning Project, how do you now feel about math?

In Step 1, Identifying the Problem, the following statement is made:

“Here are some problem clarification questions you may want to consider when reading test questions.” Did those clarification questions help you to solve the problems?

In Step 2, Becoming Familiar with the Problem, you are asked to take note of questions you might use when taking a test. What questions in that section did you find the most helpful?

The least helpful?

What questions in Step 3, Planning and Performing Tasks, helped you to become aware of the reasoning and operations to be used to solve or guess at the solution to GED math problems? Explain.

In the introduction to Step 4, Sharing, the following statement is made: “Telling other people what you know helps you to understand the material better.” Did telling others how you did a math problem help you to understand better? Explain.