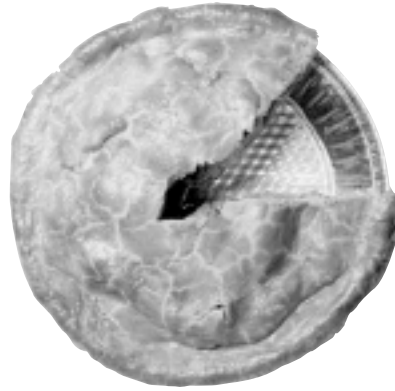




Learning Project 6

Fractions, Proportions and Percents



Introduction

In this Learning Project, the mathematical emphasis is on the basic concepts regarding fractions, proportions and percents and their interrelationships. Fractions are dealt with in extension activities that support the concepts of proportions and percents, not as the main stimulus in these Inquiry Activities.

This Learning Project will have the learners go through each of the questions just as they are presented in the test, emphasizing, in addition to the math concepts considered, such test-taking skills as to how to use the multiple choice answers to help come up with an answer and not to use the answer grid. Of course, calculator use will be explored for those questions in which its use is permitted.

Inquiry Activity 6-1 is a proportion problem based on question 14 of the Official Practice Test (PA) for which calculator use is not allowed. This question has the traditional multiple-choice answers.

Inquiry Activity 6-2 is also a proportion problem and is based on question 18 of the Official Practice Test (PA) for which calculator is not allowed. This question requires the learner to place the answer on an answer grid.

Inquire Activity 6-3 is the final proportion problem in this Learning Project and is based on question 25 of the Official Practice Test (PA) for which calculator use is not allowed. While the first two proportion Inquiry Activities require the learner to answer to the proportion, this activity asks the learner for the set up of the problem, not the solution.

The next question has the traditional multiple-choice answers. Inquiry Activity 6-4 is based on question 10 of the

Official Practice Test (PA) for which calculator use is allowed. This question also requires the learner to place the answer on an answer grid. Question 10 is a multi-step percent problem that also requires subtraction. This is a good problem to use to focus on the estimation process, providing that the learners first understand the concept of percents. Since the calculator can be used, it is also a good problem for the learner to discover how to use the calculator to do a percent problem. This also leads to the many different ways to use the calculator to solve the problem.

Inquiry Activity 6-5 is based on question 12 of the PA version of the 2002 GED Practice Test for which a calculator is allowed. This question has the traditional multiple-choice answers, which can guide the learner in the estimation process (eliminate choices 1 and 2). How one tips in restaurants can help with this problem since you can figure in your head what 10% of 650 is and then halve that figure. Since a calculator can be used, the learners can again explore the many ways to use the calculator to solve a percent problem. Inquiry Activity 6-6 is based on question 23 of the PA version of the 2002 Practice Test for which a calculator is not allowed to be used. This question has the traditional multiple-choice answers, one of which is “not enough information is given.” This is one of the few chances to discuss this answer choice in the PA version of the Practice test.