

## Common Errors and Misconceptions in Algebra

Bronwen Moore, Math 107 (at the beginning of the semester) or Math 100 (at the end of the semester)

**OBJECTIVE/ PURPOSE:** To reveal and repair students' misconceptions in Algebra.

**TUTOR DIRECTIONS:** The student should approach you with a completed worksheet. Check the answers for correctness. However, **DO NOT** show the students the correct solutions. Instead, focus on the missed problems and try to get the student to talk about their original process in these problems. Listen carefully to what the student says. It would be best if you could lead the student to his/her own correct answer so that that student can have a sense of ownership and discovery. These exercises may seem very basic, but they have been carefully chosen because they are foundational. Missing any of these problems may indicate that there is a fundamental gap or a misunderstanding in the student's knowledge base. Your job is not to just to guide the student to the correct answer, but also to repair the needed foundation so the student might stop making these common errors in the future.

### ACTIVITY:

The student is to attempt exercises on his/her own. A typical student will probably think that these problems are relatively easy and familiar, and s/he will expect to get most of them right on the first attempt. However, these problems have been carefully chosen because within them are common mistakes and misconceptions. The tutor will correct the problems for the student. Then the student and the tutor will carefully go over the missed problems, focusing on the foundational concepts and not just the correct answers.

### TUTOR FEEDBACK:

Student Name \_\_\_\_\_

Date \_\_\_\_\_ Length of Session: \_\_\_\_\_

Student signature \_\_\_\_\_ Tutor signature \_\_\_\_\_

Tutor feedback: