Differentiating for High-Ability Learners in Mathematics

For some students, math lessons or math “challenges” can be largely self-directing. The lesson or challenge can also be self-correcting at the option of the teacher by reproducing the answer(s) found in the *Teacher’s Resource Guide* the teacher chooses to use.

**Teacher Guidelines**

1. Always pair students of like ability

2. At times, you may have an uneven amount of children, making it necessary to form a cooperative team of three. Assign to that team only students who work well with others.

3. Do the exercises or challenge problem yourself and note any difficult or other items you will want to stress. This will assist you when the students working independently or in cooperative pairs need your help.

   - Each pair of students reads the directions or challenge problem(s) to each other and discusses what to do. Demonstrate this procedure beforehand.

   - When the pairs (or threesome) understand what they are to do, they separate and each does his or her own work.

   - When the members of the team have completed the page or challenge problem(s), they get together and compare their answer(s). If they both have the same answer(s), the team members explain to each other how they got their answer(s). Usually this is sufficient. In the case of continued disagreements, the answers should be discussed with the teacher.

   - Finally the pair checks its answer(s) against the *Teacher’s Answer*.
Math Problem Solving Team

Student Directions

1. Read the directions or challenge problem carefully. Then discuss with your partner what the directions or challenge problem asks you to do.

2. Separate and try to solve the problem(s) by yourself.

3. Compare your answer(s) with your partner. If you both have the same answer, you are both probably correct. If your answers are different, one of you is probably wrong. By explaining to each other how you got your answer, it usually becomes clear which one of you is correct.

4. Mark the answers you cannot agree on.

5. Check your answer(s) together against the Teacher's Answer. The person who had the correct answer should explain how he or she got it.

6. In the case where both have the same answer and the same answer is wrong, work together to see how the correct answer was achieved.