**LESSON PLAN**

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| **Teachers:** Şakire Örmeci  **Date:** 30.01.2012  **Grade Level:**  Shell M 3 **No. Of students:** 17  **Lesson Length:** 35 minutes  **Topic:** Simultaneous Equations  **Lesson Objectives:**   * Students should comprehend the elimination method to find the solution of simultaneous equation. * Students will be able to solve simultaneous equations in where one of variables can be eliminated first step. * **Materials:** Board marker, board, power point, video. |

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| **Time** | **Content** | **Teachers’ activity** | **Students’ activity** |
| 8’  **Warm up** | * Introduction * Watching video (2 min) * Problem presented in video | Teacher introduces herself and greets with students. Then she explains what they are going to learn in this week and says:  “Simultaneous equations have been a concern for humanity since ancient times. Chinese mathematicians were the first people who found the solution methods of simultaneous equations.”    After that teacher shows the video to attract students. In the video, man solves a simultaneous equation problem by using a pair of scales. Teacher shows the video problem and says students;  “Here is the problem stated in the video. Soon, I will want you to solve this problem in written way but before let learn how to solve this problem with mathematical language.” | |
| **5’** | Elimination Method  1st type | Teacher states that by eliminating one of the unknown variables, the solution of simultaneous equation can be found. Then teacher introduces the first type and ask students  “Which variable can we eliminate and how?”  After a few students tell their ideas, teacher explained how to solve 1st type problems. | |
| **8’** | Exercise 1& 2 | Teacher solves the first exercise by asking students and let students solve the second exercise. While students solving, she walks around and help them. | |
| **5’** | Type 2 | Similar to 1st type, 2nd type contains same coefficient variables with same signs. Again teacher asks students;  “How can we eliminate one unknown variable?”  Then she explained solution way of the problem. In addition teacher let students take note on their book. | |
| **9’** | Exercise 1 & 2 | Students try to solve problems individually and teacher helps them when they have difficulty to solve.  Two problems are designed to eliminate different variables in each question in order to prevent misconceptions. | |