

ALTERNATIVE EDUCATION

Module 11, Session 1 Lecture Notes

Lecture Notes (Session 1)

1. Discuss the quick write responses.
*Note the responses to the typical math problems by associating them with the math problems in the scenario.
*Stress the need for teachers to ensure that pupils are proficient in using calculators so that pupils can fully concentrate more on what is needed to solve a problem.
2. Hand out the scenario explaining that this scenario will be used throughout all the lessons in guiding them to consider ways of supporting their pupils' math skill development. Suggest that as they work through it, they might be thinking of additional scenarios that they can develop to engage their students in problem solving.
3. Discuss the scenario as a way of introducing/reviewing/developing computational, procedural and problem solving skills with students who are struggling with math. When given this scenario, pupils will need to figure out the steps involved in making an informed decision as an employer.
4. Distribute the handout as a guide for the small group discussion. Have each group share their responses. Have students look at the standards and reflect on their own pupils.
5. If the participants are teachers or are working in classrooms, distribute the individual activity sheet to provide them with the opportunity to consider their own pupils' needs.

Scenario

You are the employer of a skateboard company called North American Skateboard Company. You are in the process of reorganizing the work area. Currently, there are nine employees who assemble the skateboards. You are moving them to another room.

You need to consider the following in order to determine whether you can hire more workers or whether you need to lay off workers according to the space available:

1. Square feet of the current room and square feet of the new room

Square feet of work area needed for each of the workers
Differences between the square footage of each room.
Availability of new space to accommodate the workers.

When given specific information about the work area, pupils will come to the conclusion that there is not enough room for all nine workers. At that point, they need to be given additional information to make a decision about which employee to let go: hours each employee works per week, salaries, and production rates.

Hours each employee works per month and per quarter
Production of each employee
True Production: work production- rejects
Salary: month, quarter