

**Task: Spreadsheet Manipulation
Computer Technology/Grade 8**

Describe the context of your task here. Separate the parts of the task into A, B, C, etc.

- A) Set-up Excel Spreadsheet of daily math problems (1-10)
- B) Input data from math class (correct/incorrect) for 5 days
- C) Manipulate formulas to see percentage of daily correct as well as problem number percentage.
- D) Determine what causes trends in incorrect problems

Common Core State Standards

List the Common Core State Standards (and math practices if applicable) associated with your task.

8.F.A.1

Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.

Essential Understandings

What key insights should students take from participating in this task?

- Functions provide a tool for describing how variables change together. Using a function in this way is called modeling, and the function is called a model.
- Functions can be represented in multiple ways—in algebraic symbols, situations, graphs, verbal descriptions, tables, and so on—and these representations, and the links among them, are useful in analyzing patterns of change.
- Some representations of a function may be more useful than others, depending on how they are used.
- Linear functions have constant rates of change.

Possible Solutions/Solution Paths

What solutions or solution paths are acceptable in achieving a correct response for this task? Be sure to address all parts of the task.

Students should remember that they may have more than 10 problems on a daily basis, but to get a consistent running, they should only record the first 10 each day.

Students need to be aware that 100 would be for a correct problem and 0 would be for an incorrect problem in order to get a correct percentage in the function column.

Additional Teacher Information

Add any additional notes that will help the teacher execute the task including necessary manipulatives, equipment, etc., and possible students misconceptions that may need to be addressed.

Computer with Excel

Data to be used. This task could be used with different sets of data (detention referrals, absences, etc.).

Background knowledge of spreadsheet needs to be in place. Students need a strong basis of information on spreadsheets before encountering this lesson. Deep thinking process is relevant for a complete understanding of the concept.