## Using Multiple Representations across Grade Levels and Courses

## RULE OF 4 LINK SHEET

Most students are taught to solve math problems by using what is called traditional algebra, that is, by defining variables, then writing and solving equations. Using multiple representations allows students to enter a problem in a number of wayswith words, numbers, and graphs as well as with equations/symbols. In this way, they can use the representation(s) that work for them, and they can move among representations to make connections and solve the problem.

The Rule of 4 Link Sheet encourages students to look for patterns, to communicate what they know and are able to do. Our goal is to get students to "think link" so that they will have access to multiple ways to enter and solve problems.

| Communicating what we know about |  |
| :---: | :---: |
| Verbal Description | Table |
| $\begin{gathered} \frac{\text { Communicate }}{\text { in Words }} \\ \text { orally and/or in writing } \end{gathered}$ | Communicate Numerically <br> $\square$ <br> $\square$ <br>  |
| Graph | Equation(s) |
| Communicate Graphically $\square$ | Communicate Symbolically (algebraically) $y=$ |

Rule of 3: Use Tables, Graphs, Equation(s)
Rule of 4: Use Tables, Graphs, Equation(s), Words
Rule of 5: Use Tables, Graphs Equation(s), Words, Diagrams/Models

