



Tables, graphs, and symbols are alternative ways of representing data and relationships that can be translated from one to another.

Use tables, charts, and graphs in making arguments and claims in oral, written, and visual presentations.

Check graphs to see that they do not misrepresent results by using inappropriate scales or by failing to specify the axes clearly.

A graph represents all the values that satisfy an equation, and if two equations have to be satisfied at the same time, the values that satisfy them both will be found where the graphs intersect.

Graphs and equations are useful (and often equivalent) ways for depicting and analyzing patterns of change.

Geometric shapes and relationships can be described in terms of symbols and numbers- and vice versa.

The position of any point on a surface can be specified by two numbers.

Find and describe locations on maps with rectangular and polar coordinates.

Organize information in simple tables and graphs and identify relationships they reveal.

Logical connections can be found between different parts of mathematics.

Graphs can show a variety of possible relationships between two variables. As one variable increases uniformly, the other may do one of the following: increase or decrease steadily, increase or decrease faster and faster, get closer and further.

The graphic display of numbers may help to show patterns such as trends, varying rates of change, gaps, or clusters that are useful when making predictions about the phenomena being graphed.

It takes two numbers to locate a point on a map or any other flat surface. The numbers may be two perpendicular distances from a point, or an angle and a distance from a point.

Read simple tables and graphs produced by others and describe in words what they show.

If 0 and 1 are located on a line, any other number can be depicted as a position on the line.

Tables and graphs can show how values of one quantity are related to values of another.

Mathematical ideas can be represented concretely, graphically, and symbolically.

Quantities and shapes can be used to describe objects and events in the world around us.

Graphical display of quantities may make it possible to spot patterns that are not otherwise obvious, such as cycles and trends.

Numbers and shapes can be used to tell about things.

Simple graphs can help to tell about observations.

Numbers can be used to count things, place them in order, measure them, or name them.

Use whole numbers in ordering, counting, identifying, measuring, and describing objects and events.