

CONCEPT Charts are various representations created from a large set of information. Charts can include graphs, diagrams, or be in the form of tables of data.

The term Graph generally means a specific type of chart that shows the mathematical relationship between varied sets of data. A Graph is a type of subgroup of a Chart.

A Chart can take the form of a Graph, a table, or some other diagram or picture or visualization form.

BACKGROUND

Every time you graph an equation on a Cartesian coordinate system, you use the work of René Descartes, a French mathematician, and philosopher. Cartesian coordinates are used to locate a point in space by giving its relative distance from perpendicular intersecting lines. In coordinate geometry, all points, lines, and figures are drawn in a coordinate plane. By reference to the two coordinate axes, any point, line, or figure may be precisely located.

Visualization of data for reports became extremely easy with the invention of spreadsheet computer programs like Microsoft Excel. Today's business world relies on the strength of software programs such as Excel and Access. The creation of graphical representations helps many companies understand data pictorially rather than just using numbers mathematically.

REAL WORLD CONNECTIONS

On any map, the location of a country or a city is usually given as a set of coordinates. This forms numbered and lettered/named streets and help systematically set up city planning grids. The location of a ship at sea is determined by longitude and latitude, which is an application of the coordinate system to the curved surface of the Earth. Additionally, computer graphic artists create figures and computer animation by referencing coordinates on the screen. These are common applications of a coordinate plane.

