

Venn diagram

A Venn diagram shows the relationships between groups of (sets). These diagrams are found (for example) in research, biology, mathematics, business, computer applications, and in statistics.

Here is a Venn diagram that shows the relationship among three overlapping sets A (horse), B (saddle) and C (leather). The intersection areas relation shows where sets have characteristics in common. An element is a member of the intersection of two sets only if that element is a member of both sets. Venn diagrams are generally drawn within a large rectangle that denotes the universe, or all elements under consideration.



In this example, points that belong to none of the sets A (horse), B (saddle), or C (leather) are gray (the universe). Searching Google™ that had a universe of over 3 billion items produced this particular diagram. The red box shows the number of pages that contained the word “horse”. Similarly the green box is for the word leather, and the blue box is for saddle.

The intersections show where two sets have items in common. Yellow represents pages that contain horse and leather, light blue contain saddle and leather, lavender contains horse and saddle and finally white contains all three terms, horse and leather and saddle.

Venn diagrams allow you to see the relationship between sets of items.

Venn Diagrams are useful in the business and science for analysis of data when looking for relationships.