Glossary

Water-pipe problem Consider a network of water pipes to be inspected. Is it possible to pass a hand over each pipe exactly once without lifting it from a pipe, and without going over the same pipe more than once?

Webster's apportionment plan An apportionment plan in which the representation of a geographical area is determined by finding the quotient of the number of people in that area divided by the total number of people and then rounding the result as follows: Any quotient with a decimal portion must be rounded to the nearest whole number.

Weight (1) In everyday usage, the heaviness of an object. In scientific usage, the gravitational pull on a body. (2) In a network or graph, a cost associated with an edge.

Weighted graph A graph for which all its edges have weight.

Weighted mean If the scores $x_1, x_2, x_3, \cdots, x_n$ occur $w_1, w_2, \cdots, w_n$ times, respectively, then the *weighted mean* is

$$\bar{x} = \frac{\Sigma(w \cdot x)}{\Sigma w}$$

Well-defined set A set for which there is no doubt about whether a particular element is included in the given set.

Whole numbers The positive integers and zero; $\mathbb{W} = \{0, 1, 2, 3, \cdots\}$.

Windows A graphical environment for IBM format computers.

With replacement If there is more than one step for an experiment, to perform the experiment with replacement means that the object chosen on the first step is replaced before the next steps are completed.

Without replacement If there is more than one step for an experiment, to perform the experiment without replacement means that the object chosen on the first step is not replaced before the next steps are completed.

Word processing The process of creating, modifying, deleting, and formatting textual materials.

World Wide Web A network that connects together computers from all over the world. It is abbreviated by www.

WYSIWYG: An acronym for What You See Is What You Get.