What is Discrete Math?

Discrete mathematics is the branch of mathematics dealing with objects that can assume only distinct, separated values. The term "discrete mathematics" is therefore used in contrast with "continuous mathematics," which is the branch of mathematics dealing with objects that can vary smoothly (and which includes, for example, <u>calculus</u>). Whereas discrete objects can often be characterized by <u>integers</u>, continuous objects require <u>real numbers</u>.

The study of how discrete objects combine with one another and the probabilities of various outcomes is known as <u>combinatorics</u>. Other fields of mathematics that are considered to be part of discrete mathematics include <u>graph theory</u> and the <u>theory of computation</u>. Topics in <u>number theory</u> such as <u>congruences</u> and <u>recurrence relations</u> are also considered part of discrete mathematics.

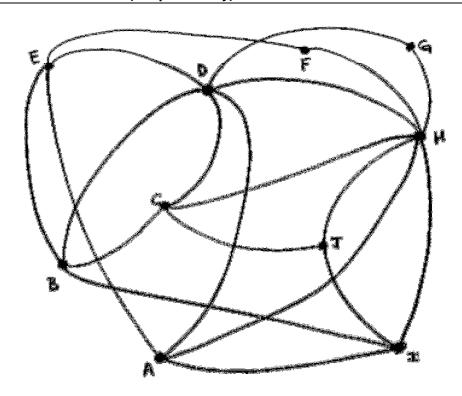
The study of topics in discrete mathematics usually includes the study of <u>algorithms</u>, their implementations, and efficiencies. Discrete mathematics is the mathematical language of computer science, and as such, it importance has increased dramatically in recent decades.



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How Many Edges Do You Count? (Graph Theory)



Is Your ID Number Valid? (Number Theory)

1-019-32823-1	5-882-18117-8	4-311-64938-X	5-879-83057-8	3-325-20852-5
9-978-38102-3	5-264-10510-3	3-735-52382-X	8-288-72855-3	9-926-96410-9
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What's the Message Saying? (Cryptography)

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