Mathematical Foundations for Computer Applications

SUM RULE

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THE SUM RULE

- If a task can be done either in one of n_1 ways or in one of n_2 ways, where none of the set of n_1 ways is the same as any of the set of n_2 ways, then there are $\boldsymbol{n_1 + n_2}$ ways to do the task.

THE SUM RULE-Problems

1. Suppose that either a member of the mathematics faculty or a student who is a mathematics major is chosen as a representative to a university committee. How many different choices are there for this representative if there are 37 members of the mathematics faculty and 83 mathematics majors and no one is both a faculty member and a student?

- **37 + 83 = 120 possible ways to pick this representative.**

THE SUM RULE-Problems

2. There are 9 kinds of pizzas, and 6 kinds of pastas. Bruce wants to try a different meal each day. How long does it take for him to try each meal once ?

Altogether, there are 9 + 6 = 15 kinds of meal

- **Bruce needs 15 days**

THANK YOU

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