

How Many Meetings? Different Ways of Helping Students Understand a Familiar Counting Problem

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If a college has n administrators, how many distinct combinations of meetings are possible between them? What is the effect on the number of possible meetings if one more administrator is hired? Students trained in the formulaic application of binomial coefficients and Pascal's triangle should be able to obtain the correct answer, but two other methods are presented here that encourage intuitive thinking. These methods serve to illustrate the binary nature of sampling, exponential growth, and the use of a recurrence relation to define a function. This problem also lends itself to a coding exercise for students to generate all possible combinations of personnel. Suggestions are provided for further investigations that place constraints on the make-up of each meeting.

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