Getting Started

For You to Do

You're in a class with a total of five students: Rocky, Bullwinkle, Peabody, Sherman, and (your name here). You want to choose a committee to get the refreshments for the class party. Remember that "Rocky and Sherman" is the same committee as "Sherman and Rocky,"

1. **a.** How many different committees of three people include Bullwinkle?
b. How many different committees of three people *don't* include Bullwinkle?
c. How many different committees of three people are there in a group of 5 students?

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Some people call this the "distinguished member method." Bullwinkle is the distinguished member. You count all the committees that contain Bullwinkle, then count all the committees that don't,and then . . . .

2. **a.** How many 2-person committees can you make from 5 students?
b. How many 3-person committees can you make from 6 students?

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One idea: use the result of problem 1 and the distinguished member method.

3. **a.** How many 1 member committees can you form from 100 students?
b. How many 99 member committees can you form from 100 students?
c. How many 100 member committees can you form from 100 students?
d. How many 0 member committees can you form from 100 students?

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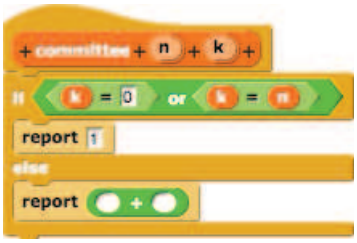
How can you have a committee with 0 members? Find a way for that to make sense.

4. Describe the "distinguished member method" in words, so precisely that others in your class understand it.

5. Here's a start on a reporter that will return the number of k-person committees that can be formed from n-students.



Finish it off.