

## Problem-Solving Application: Make Predictions

Shira played a grab-bag game with her friends. Each person reached into a bag filled with snacks. The table shows the snacks taken by the first 20 of her friends to try the game. Use the table to solve Problems 1–5.

Number of Friends	Snacks Taken
1	a box of mints
4	a box of raisins
5	a bag of peanuts
10	a bag of popcorn

### Show Your Work

1. What is the probability of getting no snack? Explain.

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2. What is the probability that friends will get a snack other than raisins?

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3. What is the probability that Shira's friends will get a box of mints?

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4. Suppose Shira invited a total of 40 people to play the grab-bag game. How many people would you expect to get a box of mints out of 40 possible snacks?

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5. If there are 40 friends and 40 snacks, how many more friends would get popcorn than raisins? Explain.

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