

2ACE Exercises 5–8**Investigation 2****Samples and Populations**

A middle school has 350 students. One math class wants to find out how many hours a typical student in the school spent doing homework last week. Several students suggest plans for selecting a sample of students to survey.

For Exercises 5–8, (a) name the type of sampling method, and (b) tell whether you think it would give a sample that lets you make accurate predictions about the population.

5. Zak suggests **surveying every third** student on each homeroom class list.

Sampling method:

Is it a representative sample?

6. Kwang-Hee suggests putting **320 white beans** and **30 red beans** in a bag. Each student would draw a bean as he or she enters the auditorium for tomorrow's assembly. The 30 students who draw red beans will be surveyed.

Sampling method:

Is it a representative sample?

7. Ushio suggests that each student in the class **survey everyone** in his or her English class.

Sampling method:

Is it a representative sample?

8. Kirby suggests putting **surveys on a table** at the entrance to the school and asking students to return completed questionnaires at the end of the day.

Sampling method:

Is it a representative sample?