

**LESSON
6.5****Practice A***For use with the lesson "Compare Surveys, Experiments, and Observational Studies"*

Tell why the question may be biased or otherwise introduce bias into a survey.

1. "Do you support the school board's plan for a new dress code for all schools?"
2. A reporter asks a state employee, "Will you continue to support the governor if he decreases spending by cutting state worker benefits?"
3. "Do you think another lane should be added to the interstate highway to reduce heavy traffic?"
4. A teacher asks students, "How many hours do you spend studying each week?"

Identify each situation as an experiment or observational study.

5. A teacher asks her students if they have after-school jobs. She wants to examine whether an after-school job affects students' grades.
6. An employee of a laundry service wants to determine the effectiveness of a stain removal product. He washes 30 stained shirts with the product and 30 stained shirts without the product.
7. A cell phone company asks their customers if they have a data plan with their service. The company wants to determine if the data plan has an effect on the number of minutes that are used on average each month.
8. A grocery store manager wants to determine the effectiveness of self checkout. She times 25 transactions using self checkout and 25 transactions performed with a cashier.
9. Is the study described below in the injury report a randomized comparative experiment? Explain.

Injury Report
Players who wear detachable cleats are less likely to be injured. The 280 players in a semi-professional football league wear molded cleats or detachable cleats. The number of injuries was observed closely for one season. At the end of the season, the players who wore molded cleats had 15% more injuries than the players who wore detachable cleats.