

**LESSON**  
**6.4****Practice B***For use with the lesson "Select and Draw Conclusions from Samples"***Identify the type of sample described. Then tell if the sample is biased.****Explain your reasoning.**

1. A consumer advocacy group wants to know if car owners believe their car is reliable. The group randomly selects 1020 car owners and mails out a survey to each one.
2. A grocery store wants to know which day of the week consumers prefer to do their grocery shopping. Everyone who shops at the store on Friday is asked which day of the week they prefer to do their grocery shopping.
3. A survey of students' favorite school subjects is being conducted. Every other student in the math club is asked "Which school subject is your favorite?"

**Find the margin of error for a survey that has the given sample size.****Round your answer to the nearest tenth of a percent.**

- |         |        |         |          |
|---------|--------|---------|----------|
| 4. 200  | 5. 350 | 6. 1100 | 7. 2600  |
| 8. 5200 | 9. 495 | 10. 280 | 11. 9000 |

**Find the sample size required to achieve the given margin of error.****Round your answer to the nearest whole number.**

- |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
| 12. $\pm 2\%$   | 13. $\pm 4\%$   | 14. $\pm 9.5\%$ | 15. $\pm 2.7\%$ |
| 16. $\pm 4.5\%$ | 17. $\pm 0.5\%$ | 18. $\pm 3.6\%$ | 19. $\pm 7.5\%$ |

**In Exercises 20 and 21, use the following information.****Technology Survey** In a survey of 504 people in the United States, about 11% said that the influx of new technologies such as computers has left them feeling overwhelmed.

20. What is the margin of error for the survey? Round your answer to the nearest tenth of a percent.
21. Give an interval that is likely to contain the exact percent of all people in the United States who feel overwhelmed by the influx of new technologies.

**In Exercises 22–25, use the following information.****TV in the Bedroom** A survey reported that 510 kids ages 8 to 18, or 68% of those surveyed, have a TV in their bedroom.

22. How many kids ages 8 to 18 were surveyed?
23. What is the margin of error for the survey? Round your answer to the nearest tenth of a percent.
24. Give an interval that is likely to contain the exact percent of all kids ages 8 to 18 who have a TV in their bedroom
25. About how many kids ages 8 to 18 should be surveyed to have a margin of error of 2.5%?