

**LESSON  
6.4****Practice C***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 team wants to know who the fans think was the team's most valuable player during the season. Fans can vote on the team's website.
2. The managers of a movie theater chain want to find the number of movies people in the community usually see in a theater each month. The managers have the ticket sellers at each theater survey customers when they purchase their tickets.
3. The managers of a company with 500 employees want to know how the employees feel about some proposed changes to employee policies. The managers use a computer to generate a list of 50 employees to survey from a database that includes all of the employees.

**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. 586  | 5. 817  | 6. 935   | 7. 642     |
| 8. 5700 | 9. 8968 | 10. 7103 | 11. 12,000 |

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

- |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|
| 12. $\pm 2.4\%$ | 13. $\pm 5.1\%$ | 14. $\pm 3.8\%$ | 15. $\pm 1.2\%$ |
| 16. $\pm 5.9\%$ | 17. $\pm 3.3\%$ | 18. $\pm 4.6\%$ | 19. $\pm 0.7\%$ |

**In Exercises 20 and 21, use the following information.**

**Wheelchair** A new medically approved wheelchair was considered to be an improvement over a standard wheelchair by 325 out of 450 patients in a survey.

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 patients who would consider the new wheelchair an improvement.

**In Exercises 22–24, use the following information.**

**City Park** A survey claims that the percent of an entire population that agrees with redeveloping the city park is likely between 49.1% and 57.5%. The remainder of the people in the survey were against redevelopment.

22. How many people were surveyed?
23. Find the interval that is likely to contain the exact percent of people in the population against redevelopment.
24. How many people in the survey would need to agree with redevelopment in order for you to be confident that the majority of the population agrees with redevelopment?