

10.2 Practice B

In Exercises 1 and 2, determine whether the data is collected from a population or a sample. Explain your reasoning.

- the address of every student in the school
- a survey of 80 people who access a website

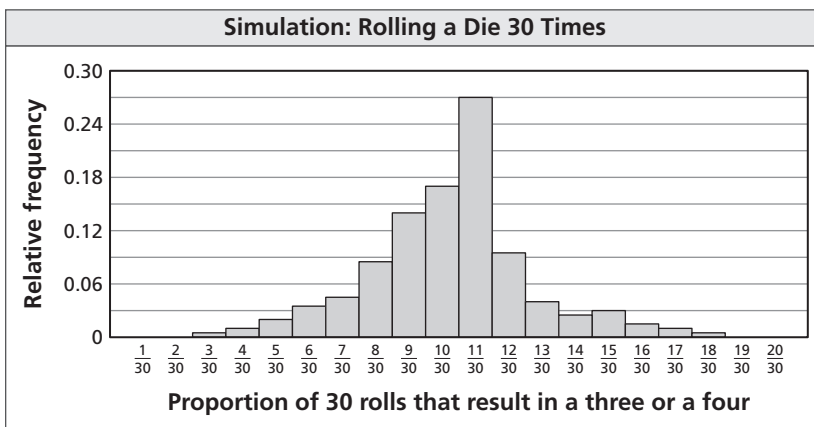
In Exercises 3 and 4, identify the population and sample. Describe the sample.

- In an office building, a survey of 648 employees found that 147 of them ride the subway to work each day.
- In Florida, a survey of 2500 homeowners found that 1145 of them have switched their homeowner's insurance policy to a different company within the last 3 years.

In Exercises 5 and 6, determine whether the numerical value is a parameter or a statistic. Explain your reasoning.

- Thirty-four percent of the surveyed hockey players first played hockey before their 10th birthday.
- Eighty-two percent of all the tickets sold were for the Saturday matinee.
- You roll a six-sided die 8 times and get either threes or fours. The probability of this happening is $\left(\frac{2}{6}\right)^8 \approx 0.0001524$, so you suspect this die favors threes and fours.

The die maker claims the die does not favor threes or fours. You simulate rolling the die 30 times by repeatedly drawing 200 samples of size 30. The histogram shows the results.



- What should you conclude when you roll the actual die 30 times and get 5 threes and fours?
- What should you conclude when you roll the actual die 30 times and get 10 threes and fours?