



4. On average, 24% of customers who buy shoes in a particular store buy two or more pairs. One weekend, 350 customers purchased shoes. How many can be predicted to buy two or more pairs? If 107 customers buy more than two pairs, did more customers than normal buy two or more pairs?

Guided Practice

- A baseball player reaches first base 30% of the times he is at bat. Out of 50 times at bat, about how many times will the player reach first base? (Example 1)
- 2. The experimental probability that it will rain on any given day in Houston, Texas, is about 15%. Out of 365 days, about how many days can residents predict rain? (Example 1)
- **3.** A catalog store has 6% of its orders returned for a refund. The owner predicts that a new candle will have 812 returns out of the 16,824 sold. Do you agree with this prediction? Explain. (Example 2)
- 4. On a toy assembly line, 3% of the toys are found to be defective. The quality control officer predicts that 872 toys will be found defective out of 24,850 toys made. Do you agree with this prediction? Explain. (Example 2)
- 5. A light-rail service claims to be on time 98% of 6. the time. If Jeanette takes the light-rail 40 times one month, how many times can she predict she will be on time? Is the light-rail's claim accurate if she is late 6 times? (Example 3)
- On average, a college claims to accept 18% of its applicants. If the college has 5,000 applicants, predict how many will be accepted. If 885 applicants are accepted, is the college's claim accurate? (Example 3)

ESSENTIAL QUESTION CHECK-IN

7. How do you make predictions using experimental probability?