

| <b>Chapter 5 Learning Objectives</b>  | <b>Section</b> | <b>Related Example on Page(s)</b> | <b>Relevant Chapter Review Exercise(s)</b> | <b>Can I do this?</b> |
|---|----------------|-----------------------------------|--|-----------------------|
| Interpret probability as a long-run relative frequency.   | 5.1            | 291, 292, 293, 294, 295           | R5.1                                       |                       |
| Use simulation to model chance behavior.  | 5.1            | 296, 297                          | R5.2                                       |                       |
| Determine a probability model for a chance process.   | 5.2            | 306                               | R5.3, R5.10                                |                       |
| Use basic probability rules, including the complement rule and the addition rule for mutually exclusive events. | 5.2            | 308                               | R5.4, R5.10                                |                       |
| Use a two-way table or Venn diagram to model a chance process and calculate probabilities involving two events. | 5.2            | 309, 312, 313                     | R5.4, R5.5, R5.7, R5.8                     |                       |
| Use the general addition rule to calculate probabilities.   | 5.2            | 313                               | R5.4, R5.5                                 |                       |
| Calculate and interpret conditional probabilities.  | 5.3            | 318, 320                          | R5.6, R5.8                                 |                       |
| Use the general multiplication rule to calculate probabilities.   | 5.3            | 322                               | R5.6                                       |                       |
| Use tree diagrams to model a chance process and calculate probabilities involving two or more events.           | 5.3            | 322, 324, 325                     | R5.6                                       |                       |
| Determine whether two events are independent.   | 5.3            | 327                               | R5.7, R5.8                                 |                       |
| When appropriate, use the multiplication rule for independent events to compute probabilities.                  | 5.3            | 329, 331                          | R5.9, R5.10                                |                       |