1 CHAPTER SUMMARY

BIG IDEAS

For Your Notebook

Finding Probabilities of Simple Events

To find <i>P</i> (<i>A</i>) when	
all outcomes are equally likely, use	you perform an experiment, use
$P(A) = \frac{\text{Number of favorable outcomes}}{\text{Number of possible outcomes}}$	$P(A) = \frac{\text{Number of successes}}{\text{Number of trials}}$

Big Idea 📿

Big Idea 🚺

Finding Probabilities of Compound Events

To find <i>P</i> (<i>A</i> or <i>B</i>) when	use this formula
events <i>A</i> and <i>B</i> are disjoint or mutually exclusive, that is, when events <i>A</i> and <i>B</i> have no common outcomes	P(A or B) = P(A) + P(B)
events <i>A</i> and <i>B</i> are overlapping, that is, when events <i>A</i> and <i>B</i> have at least one common outcome	P(A or B) = P(A) + P(B) - P(A and B)

To find <i>P</i> (<i>A</i> and <i>B</i>) when	use this formula
events A and B are independent	$P(A \text{ and } B) = P(A) \cdot P(B)$
events A and B are dependent	$P(A \text{ and } B) = P(A) \cdot P(B \text{ given } A)$