

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**Module 20** Solving Problems Using Probability,  
Statistics, and Discrete Math  
**Lesson 3** Solving Advanced Probability Problems



**guided  
notes**

### Lesson Objectives

- Find the probability of independent events.
- Find the probability of dependent events.

Two events are \_\_\_\_\_ events if the occurrence of one event does not affect the probability of the other.

For independent events A and B,  $P(A \text{ and } B) =$  \_\_\_\_\_

- 1 A coin is tossed, and a fair die is rolled. Find the probability of getting heads and rolling an even number. \_\_\_\_\_
- 2 Two letters from the word “apple” are selected at random *with* replacement. What is the probability of selecting two “p’s”? \_\_\_\_\_

\_\_\_\_\_ events are events in which the occurrence of one event does affect the probability of the other.

For dependent events A and B,  $P(A \text{ then } B) =$  \_\_\_\_\_

- 3 The yearbook staff randomly picks pictures from a box for a slide show presentation for the senior class. The box contains 25 color photos and 50 black and white photos. What is the probability of getting a black and white photo and then a color photo if the first photo is not replaced? \_\_\_\_\_
- 4 Two letters from the word “apple” are selected at random *without* replacement. What is the probability of selecting two “p’s”? \_\_\_\_\_

