Name_____ Class _____ Date_____

# 12-8

## Practice

Probability of Compound Events

**You spin a spinner that has 8 equal-sized sections numbered 1 to 8. Find each probability.**

**1.** $P$(2 or 4)

**2.** $P$(odd or 6)

**3.** $P$(multiple of 2 or odd)

**4.** $P$(odd or greater than 3)

**5.** $P$(even or less than 4)

**6.** $P$(multiple of 3 or multiple of 2)

**7. Open-Ended** What is an example of a compound event composed of two mutually exclusive events when you spin a spinner numbered 1 to 8?

**You roll a black number cube and a white number cube. Find each probability.**

**8.** $P$(black 4 and white 4)

**9.** $P$(black even and white even)

**10.** P(black 3 or 4 and white 1 or 6)

**11.** $P$(black 1 and white odd)

**12.** $P$(black even and white greater than 2)

**Practice** <span style="float:right">*Form K*</span>

# 12-8

Probability of Compound Events

(continued)☐

**13.** The probability that Hannah will be late for dinner is $\frac{1}{2}$. What is the probability that she will be late for dinner two nights in a row?

**You choose a tile at random from a bag containing 4 tiles with R, 2 tiles with S, and 3 tiles with T. You replace the tile and then choose again. Find each probability.**

**14.** $P(\text{both S})$ <span style="float:right">**15.** $P(\text{both T})$</span>

**16.** $P(\text{R then T})$ <span style="float:right">**17.** $P(\text{T then S})$</span>

**You choose a marble at random from a bag containing 3 yellow marbles, 8 red marbles, and 4 blue marbles. You pick a second marble without replacing the first. Find each probability.**

**18.** $P(\text{red then blue})$ <span style="float:right">**19.** $P(\text{both yellow})$</span>

**20.** $P(\text{yellow then blue})$ <span style="float:right">**21.** $P(\text{both red})$</span>

**22.** The committee to plan the homecoming dance has 4 juniors and 6 seniors. To decide who will plan the decorations, the advisor puts the names of the students in a hat and randomly picks one name. Then the advisor picks another name without replacing the first. What is the probability that both students picked are seniors?