

## Practice 6-4 Probability

Find each probability for choosing a letter at random from the word **PROBABILITY**.

- 1.  $P(B)$  \_\_\_\_\_
- 2.  $P(P)$  \_\_\_\_\_
- 3.  $P(A \text{ or } I)$  \_\_\_\_\_
- 4.  $P(\text{not } P)$  \_\_\_\_\_

A child is chosen at random from the Erb and Smith families. Find the odds in favor of each of the following being chosen.

- 5. a girl \_\_\_\_\_
- 6. an Erb \_\_\_\_\_
- 7. an Erb girl \_\_\_\_\_
- 8. a Smith girl \_\_\_\_\_
- 9. not a Smith boy \_\_\_\_\_
- 10. a Smith \_\_\_\_\_

|       | Erb family | Smith family |
|-------|------------|--------------|
| Girls | 2          | 5            |
| Boys  | 4          | 3            |

A box contains 7 red, 14 yellow, 21 green, 42 blue, and 84 purple marbles. A marble is drawn at random from the box. Find each probability.

- 11.  $P(\text{red})$  \_\_\_\_\_
- 12.  $P(\text{yellow})$  \_\_\_\_\_
- 13.  $P(\text{green or blue})$  \_\_\_\_\_
- 14.  $P(\text{purple, yellow, or red})$  \_\_\_\_\_
- 15.  $P(\text{not green})$  \_\_\_\_\_
- 16.  $P(\text{not purple, yellow, or red})$  \_\_\_\_\_

Find the odds in favor of each selection when a marble is chosen at random from the box described above.

- 17. blue \_\_\_\_\_
- 18. purple \_\_\_\_\_
- 19. not red \_\_\_\_\_
- 20. not green or blue \_\_\_\_\_
- 21. yellow \_\_\_\_\_
- 22. not purple or yellow \_\_\_\_\_