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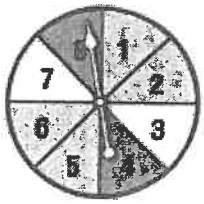
Lesson 1 Extra Practice

Probability of Simple Events

A set of 30 event tickets are placed in a bag. There are 6 baseball tickets, 4 hockey tickets, 4 basketball tickets, 2 football tickets, 3 symphony tickets, 2 opera tickets, 4 ballet tickets, and 5 theater tickets. One ticket is selected without looking. Find each probability. Write each answer as a fraction, percent, and decimal.

1. P(basketball)
2. P(sports event)
3. P(opera or ballet)
4. P(soccer)
5. P(*not* symphony)
6. P(theater)

Use the spinner at the right to find each probability. Write each answer as a fraction, percent, and decimal.



7. P(even number)
8. P(prime number)
9. P(factor of 12)
10. P(composite number)
11. P(greater than 10)
12. P(neither prime nor composite)

A package of balloons contains 5 green, 3 yellow, 4 red, and 8 pink balloons. Suppose you reach in the package and choose one balloon at random. Find the probability of each event. Write each answer as a fraction, percent, and decimal.

13. P(red balloon)
14. P(yellow balloon)
15. P(pink balloon)
16. P(orange balloon)
17. P(red or yellow balloon)
18. P(*not* green balloon)

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Lesson 3 Homework Practice

Probability of Compound Events

For each situation, find the sample space using a tree diagram.

1. choosing blue, green, or yellow wall paint with white, beige, or gray curtains

2. choosing a lunch consisting of a soup, salad, and sandwich from the menu shown in the table

Soup	Salad	Sandwich
Tortellini	Caesar	Roast Beef
Lentil	Macaroni	Ham
		Turkey

3. **GAME** Kimiko and Miko are playing a game in which each girl rolls a number cube. If the sum of the numbers is a prime number, then Miko wins. Otherwise Kimiko wins. Find the sample space. Then determine whether the game is fair.

Sum = 2	Sum = 3	Sum = 4	Sum = 5	Sum = 6	Sum = 7	Sum = 8	Sum = 9	Sum = 10	Sum = 11	Sum = 12
1 + 1 = 2	2 + 1 = 3 1 + 2 = 3	1 + 3 = 4 2 + 2 = 4 3 + 1 = 4	1 + 4 = 5 2 + 3 = 5 3 + 2 = 5 4 + 1 = 5	1 + 5 = 6 2 + 4 = 6 3 + 3 = 6 4 + 2 = 6 5 + 1 = 6	1 + 6 = 7 2 + 5 = 7 3 + 4 = 7 4 + 3 = 7 5 + 2 = 7 6 + 1 = 7	2 + 6 = 8 3 + 5 = 8 4 + 4 = 8 5 + 3 = 8 6 + 2 = 8	3 + 6 = 9 4 + 5 = 9 5 + 4 = 9 6 + 3 = 9	4 + 6 = 10 5 + 5 = 10 6 + 4 = 10	5 + 6 = 11 6 + 5 = 11	6 + 6 = 12