Practice

Probability and Odds

Find the probability of each outcome if a pair of dice are rolled. Refer to the table below, which shows all of the possible outcomes when you roll a pair of dice.

	1	2	3	4	5	6
1	(1, 1)	(1, 2)	(1, 3)	(1, 4)	(1, 5)	(1, 6)
2	(2, 1)	(2, 2)	(2, 3)	(2, 4)	(2, 5)	(2, 6)
3	(3, 1)	(3, 2)	(3, 3)	(3, 4)	(3, 5)	(3, 6)
4	(4, 1)	(4, 2)	(4, 3)	(4, 4)	(4, 5)	(4, 6)
5	(5, 1)	(5, 2)	(5, 3)	(5, 4)	(5, 5)	(5, 6)
6	(6, 1)	(6, 2)	(6, 3)	(6, 4)	(6, 5)	(6, 6)

1. an even number on the second die

2. a sum of 8

3. a sum of 7

4. an odd sum

5. a sum less than 6

6. a sum greater than 7

7. both die are the same number

8. a sum less than 2

Find the odds of each outcome if a bag contains 7 blue marbles, 3 yellow marbles, and 2 red marbles.

9. choosing a blue marble

10. choosing a red marble

11. choosing a yellow marble

12. choosing a yellow or red marble

13. choosing a yellow or blue marble

14. choosing a blue or red marble

15. not choosing a blue or red marble

16. not choosing a blue marble

Algebra: Concepts and Applications