Probability

Name: _____ **Date:** _____



Mr Boston says: A probability can never be more than 1 or less than 0.

A. Simple probability

Write each answer as a fraction.

1 A fair dice is rolled. P(5)?

Answer: _____

2 A fair dice is rolled. P(even number)?

Answer: _____

3 A fair dice is rolled. P(number greater than 4)?

Answer: _____

4 A bag has 3 red, 5 blue and 2 white balls. P(red)?

Answer: _____

5 Same bag: P(not blue)?

Answer: _____

6 Same bag: P(green)?

Answer: _____

B. Using probability

7 P(rain) = 0.35. Find P(no rain).

Answer: _____

8 P(win) = 1/8. Find P(not win).

Answer: _____

9 A spinner has P(red) = 0.2, P(blue) = 0.45 and P(green) = x. Find x.

Answer: _____

10 A fair coin is flipped 80 times. Expected number of tails?

Answer: _____

11 P(a seed grows) = 0.9. How many of 250 seeds would you expect to grow?

Answer: _____

12 Two fair dice are rolled and added. How many outcomes give a total of 7?

Answer: _____

13 So what is P(total of 7)?

Answer: _____

Answers for grown-ups

Probability

1. A fair dice is rolled. P(5)? → **1/6**
2. A fair dice is rolled. P(even number)? → **3/6 = 1/2**
3. A fair dice is rolled. P(number greater than 4)? → **2/6 = 1/3**
4. A bag has 3 red, 5 blue and 2 white balls. P(red)? → **3/10**
5. Same bag: P(not blue)? → **5/10 = 1/2**
6. Same bag: P(green)? → **0 (impossible)**
7. P(rain) = 0.35. Find P(no rain). → **0.65**
8. P(win) = 1/8. Find P(not win). → **7/8**
9. A spinner has P(red) = 0.2, P(blue) = 0.45 and P(green) = x. Find x. → **0.35**
10. A fair coin is flipped 80 times. Expected number of tails? → **40**
11. P(a seed grows) = 0.9. How many of 250 seeds would you expect to grow? → **225**
12. Two fair dice are rolled and added. How many outcomes give a total of 7? → **6**
13. So what is P(total of 7)? → **6/36 = 1/6**