

The numbers 1 through 20 are written on discs and placed in a box. A disc is drawn at random. Find the probability of each event.

1. the disc is 10 $\frac{1}{20}$

2. the disc is even $\frac{10}{20} = \frac{1}{2}$

3. the disc is prime $\frac{8}{20} = \frac{2}{5}$

4. $5 \leq$ the disc ≤ 10 $\frac{6}{20} = \frac{3}{10}$

A red die and a green die are rolled. Find the probability of each event.

5. the red die shows 6 $\frac{1}{6}$

6. the sum of the two die is 6 $\frac{5}{36}$

7. the red die shows something other than 6 $\frac{5}{6}$

8. the green die shows an 8 $\frac{0}{6} = 0$

Based on past experiences, the probability that Debbie will finish the marathon run is .75, that Molly will finish is .50, and that Mike will finish is .70. Find the probability of the following events.

9. Debbie will not finish the race .25

10. Mike and Molly will finish, but Debbie will not. $(.70)(.5)(.25) = .0875$
↑
and multiply

You take a poll to find the blood types of 200 people. Your results are shown in the table below.

BLOOD TYPE	O+	O-	A+	A-	B+	B-	AB+	AB-
Number of people	76	14	68	12	18	4	6	2

11. Find the probability that a person has type O+ blood. $\frac{76}{200} = .38$

12. Find the probability that a person has type A blood (+ or -). $\frac{80}{200} = .4$

13. In a town with 5000 people, about how many would have type B- blood?

$\frac{4}{200} = .02$ $(.02)(5000) = 100$

14. In a town with 7500 people, about how many would have type AB+ blood?

$\frac{6}{200} = .03$ $(.03)(7500) = 225$