

1. One fair, six-sided die is rolled. What is the probability that it shows a 3?
(Round your answer to the nearest hundredth.)
2. One fair, six-sided die is rolled. What is the probability that it shows a 2 or a 4?
(Round your answer to the nearest hundredth.)
3. One fair, six-sided die is rolled. What is the probability that it shows an even number?
(Round your answer to the nearest tenth.)
4. Two fair, six-sided dice are rolled, one red and one green. What is the probability that the red die shows a 2 and the green die shows a 5?
(Round your answer to the nearest hundredth.)
5. Two fair, six-sided dice are rolled. What is the probability that one die shows a 1 and the other die shows a 6?
(Round your answer to the nearest hundredth.)
6. Two fair, six-sided dice are rolled. What is the probability that the sum of the dice is 6 or less?
(Round your answer to the nearest hundredth.)
7. A number of students were asked what the legal drinking age should be. The responses are given in the table below.

Drinking age	13	14	15	16	17	18	19	20	21
# respondents	16	11	19	20	19	18	20	17	20

Based on these results, what is the probability that a student chosen at random thinks that the legal drinking age should be 19?
(Round your answer to the nearest hundredth.)

8. The table below shows the probability of picking a marble of a particular color from Jeremy's collection.

x	Red	Orange	Yellow	Green	Blue	Indigo	Violet
$P(x)$	0.08	0.18	0.17	0.15	0.16	0.15	0.11

If a marble is chosen at random, what is the probability that it will *not* be yellow?
(Round your answer to two decimal places.)

9. A fair, 20-sided die is rolled. What is the probability of rolling a number greater than 11? Round your answer to the nearest hundredth.

10. The table below shows the number of mini-cupcakes of various flavors in a cupcake shop.

Flavor	German Chocolate	Lemon Lavender	Red Velvet	Tiffany	Black & White	Oreo
Number of cupcakes	7	7	11	7	11	7

If one of these cupcakes is chosen at random, what is the probability that it is *not* a Tiffany? Round your answer to the nearest hundredth.

11. The number of households at various distances from a city center were reported in the table shown, where distances are given as percentiles of the distance from the center.

Percentile distance from center	<5	5-25	25-50	50-75	75-95	>95
Number of households	603	2417	3027	3018	2425	598

If one of these households is selected at random, what is the probability that it falls between the fifth and fiftieth percentiles? Round your answer to the nearest hundredth.