Theoretical Probability with Dice

(a)	(b)	(c)	(d)
A fair, six-sided dice numbered 1 to 6 is rolled once. What is the probability of the dice landing on a 5? $$\frac{1}{6}$$	A fair four-sided dice numbered 1 to 4 is rolled once. What is the probability of the dice landing on a 3? $$\frac{1}{4}$$	A fair ten-sided dice numbered 1 to 10 is rolled once. What is the probability of the dice landing on a 7? $$\frac{1}{10}$$	A fair ten-sided dice numbered 1 to 10 is rolled once. What is the probability of the dice landing on a 5 or 6? $$\frac{2}{10} = \frac{1}{5}$$
(e)	**(f)**	**(g)**	**(h)**
A fair, six-sided dice numbered 1 to 6 is rolled once. What is the probability of the dice landing on an odd number? $$\frac{3}{6} = \frac{1}{2}$$	A fair four-sided dice numbered 1 to 4 is rolled once. What is the probability of rolling a number less than 3? $$\frac{2}{4} = \frac{1}{2}$$	A fair ten-sided dice numbered 1 to 10 is rolled once. What is the probability of rolling a number less than 7? $$\frac{6}{10} = \frac{3}{5}$$	A fair, six-sided dice numbered 1 to 6 is rolled once. What is the probability of rolling a number that is not six? $$\frac{5}{6}$$
(i)	**(j)**	**(k)**	**(l)**
A fair, six-sided dice numbered 1 to 6 is rolled once. What is the probability of the dice landing on a prime number? $$\frac{3}{6} = \frac{1}{2}$$	A fair four-sided dice numbered $3, 4, 5$ and 6 is rolled once. What is the probability of the dice landing on a multiple of 3? $$\frac{2}{4} = \frac{1}{2}$$	A fair six-sided dice numbered $1, 1, 1, 2, 2$ and 3 is rolled once. What is the probability of rolling a 1? $$\frac{3}{6} = \frac{1}{2}$$	A fair six-sided dice numbered $1, 1, 1, 2, 2$ and 3 is rolled once. What is the probability of rolling a number that is not a 2? $$\frac{4}{6} = \frac{2}{3}$$
(m)	**(n)**	**(o)**	**(p)**
A fair ten-sided dice numbered 1 to 10 is rolled once. What is the probability of rolling a square number? $$\frac{3}{10}$$	A fair ten-sided dice numbered 1 to 10 is rolled once. What is the probability of rolling a number that is a factor of 12? $$\frac{5}{10} = \frac{1}{2}$$	The probability of rolling a 6 on a biased dice is 0.3. What is the probability of not rolling a 6? $$0.7$$	If a fair six-sided dice is rolled 60 times, how many times would you expect it to land on a 3? $$10$$