

GCSE Probability Practice Questions SET 2

1. Probability of rolling an even number on a fair six-sided dice?
2. Probability of exactly one head in two coin tosses?
3. Probability of picking a blue ball from a bag containing 3 red, 5 blue, and 2 green balls?
4. Probability a spinner lands on number 3 if divided into 4 equal sections?
5. Probability of getting two tails tossing two coins?
6. Probability of drawing a heart from a standard 52-card deck?
7. Probability it does not rain if probability of rain is 0.3?
8. Probability of picking candy that is not chocolate from a jar with 5 chocolates, 8 gummies, and 7 mints?
9. Complement of drawing a spade from a deck?
10. Probability of drawing a face card or a 10?
11. Probability that the sum of two dice is 7?
12. Probability of drawing two red balls consecutively without replacement from a bag of 6 red and 4 yellow?
13. Probability both dice show same number?
14. Probability first roll is 4 and second roll is odd in two dice rolls?
15. Probability student does not like football if 40% like it?
16. Probability both drawn marbles are white with replacement from bag with 5 black, 7 white?
17. Probability drawn card is queen or king?
18. Probability sum of spinner numbers 1 to 5 is 7 when both spun?
19. Probability a product chosen at random is defective if 4 defective in 20?
20. Probability student guesses exactly 4 correct answers out of 5 true/false questions?
21. Probability drawing ace or red card?
22. Probability dice roll is less than 3 or greater than 4?

23. Probability green ball drawn twice with replacement from bag with 3 green and 2 red?
24. Probability first tail on third flip of coin?
25. Probability at least one head in three coin flips?
26. Probability of not drawing heart?
27. Probability spinner lands on number divisible by 3?
28. Probability both cards drawn are kings?
29. Probability two balls drawn are different colors?
30. Probability event A or B if mutually exclusive rates given?
31. Probability event A and B if independent?
32. Probability two aces drawn without replacement?
33. Probability sum of dice is 9 or 11?
34. Probability of drawing a face card?
35. Probability number less than 5 drawn from balls numbered 1 to 10?
36. Probability exactly two heads in three coin flips?
37. Probability sum 6 on two dice?
38. Probability student selected is a girl from class with 10 boys, 15 girls?
39. Probability first player wins first toss in coin toss game?
40. Probability random number 1 to 100 divisible by 4?
41. Probability ball drawn is not yellow from bag with 3 green, 4 yellow, 5 red?
42. Probability event C won't happen if $P(C)=0.6$?
43. Probability dice shows 3 and drawn card is heart?
44. Probability card is face or 10?
45. Probability dice roll sum 2 or 12?
46. Probability spinner lands on 0.4 probability sector?
47. Probability letter selected from "PROBABILITY" is "A"?
48. Probability rolling a prime number on six-sided die?
49. Probability five heads in five coin flips?
50. Probability random card diamond or club?

51. Probability first target hit on third attempt, hitting with 0.3 chance?
52. Probability target hit exactly once in first three attempts?
53. Validity of assumption $\left(\frac{1}{4}\right)^2$ for two red balls drawn without replacement?
54. If assumption false, will true probability be higher or lower?
55. Complete probability tree for winning badminton matches with $p=0.6$?
56. Probability winning without needing third jump?
57. Number of red counters if red:blue=1:4 and probability two red drawn $\frac{6}{155}$?
58. Probability stopped by only one of two traffic lights, given stop probabilities and tree?
59. Original red and blue marbles in bag given probability changes on adding 5 red?
60. Probability choosing green marbles if red, blue probabilities given and green+yellow sum?
61. Probability Liz picks blue ball equals Mike picking blue given ball transfers?
62. Probability child arrives by car given different proportions of boys and girls?
63. Identify best estimator for coin landing heads among friends' results?
64. Is estimated $P(\text{head}) = 2 \times P(\text{tail})$?
65. Probability coin lands heads twice using combined data?
66. Probability winning both tennis matches with independent probabilities?
67. Probability losing at least one match out of two?
68. Probability both heads from two biased coin flips with $P(\text{two heads})=0.09$?
69. Quadratic expression from sock draw probability?
70. Probability two black socks drawn?
71. Probability exactly one red pen drawn?
72. Probability first roll 4 and second odd in dice roll twice?
73. Probability spinner lands on prime number (1 to 6)?
74. Probability card heart or queen?
75. Probability both cards face?
76. Probability two balls different colors?
77. Probability exactly two tails in three coin flips?
78. Probability rain both Monday and Tuesday independent?

79. Probability events A and B both occur?
80. Probability complement of drawing diamond or spade?
81. Probability both chosen students are girls from a class?
82. Probability two balls red with replacement?
83. Probability number 6 never appears in 3 dice rolls?
84. Expected number heads in 5 coin tosses?
85. Binomial probability exactly 3 heads in 5?
86. Probability at least one success in 3 trials with $p=0.7$?
87. Probability A or B with given intersections?
88. Calculate conditional probability: $P(A|B)$?
89. Probability number 1-100 multiple of 5 or 7?
90. Probability first win in third round given $p=0.1$?
91. How many meal combinations if 2 starters, 3 mains, 2 desserts?
92. Expected profit if charged £1, win probability known?
93. Probability of 2 heads and 1 tail in 3 coin flips?
94. Probability person choosing 100m event is female?
95. Probability pepperoni pizza lover does not like vegetable pizza?
96. Expression for probability drawing one red and one blue marble?
97. Joint probability of Liz and Mike picking blue balls?
98. Probability car stopped by only traffic light A or only B?
99. Complete tree diagram for given traffic light probabilities?
100. Given conditional probabilities at work, find probability James wears jacket and tie?