ENGLAND GCSE MATHS OCR FOUNDATION · UNIT 12 · 25 QUESTIONS

Probability — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **An ice cream cone is chosen at random from 11 cones: 3 vanilla and 8 chocolate. The probability it is vanilla is**

A $\frac{3}{11}$

B $\frac{4}{11}$

C $\frac{3}{13}$

D $\frac{8}{11}$

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2 **A shelf has 7 hardcover books: 2 red and 5 blue. The probability of picking a red book is**

- **A** $\frac{5}{7}$
- **B** $\frac{2}{7}$
- **C** $\frac{3}{7}$
- **D** $\frac{2}{9}$

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3 **A box contains 16 eggs. 3 eggs are cracked. The probability of picking a cracked egg is**

- **A** $\frac{3}{20}$
- **B** $\frac{1}{4}$
- **C** $\frac{13}{16}$
- **D** $\frac{3}{16}$

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4 **A fruit bowl contains 3 lemons and 6 apples. The probability of picking a lemon is**

- **A** $\frac{2}{3}$
- **B** $\frac{3}{11}$
- **C** $\frac{4}{9}$
- **D** $\frac{1}{3}$

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5 **A bag contains 5 red glass marbles and 2 blue glass marbles. The probability of picking a red marble is**

- **A** $\frac{5}{7}$
- **B** $\frac{6}{7}$
- **C** $\frac{5}{8}$
- **D** $\frac{2}{7}$

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6 Two silver coins are tossed. The probability of two heads is

- **A** $\frac{1}{8}$
- **B** $\frac{1}{4}$
- **C** $\frac{3}{4}$
- **D** $\frac{1}{2}$

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7 Two dice are rolled. The probability of a total of 9 is

- **A** $\frac{1}{6}$
- **B** $\frac{1}{12}$
- **C** $\frac{5}{36}$
- **D** $\frac{1}{9}$

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8 A fair coin is tossed. The probability of a head is

- A $\frac{1}{4}$
- B $\frac{1}{2}$
- C $\frac{1}{3}$
- D $\frac{2}{3}$

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9 P(A) = 0.5, P(B) = 0.3, P(A and B) = 0.1. P(A or B) is

- A 0.7
- B 0.15
- C 0.9
- D 0.8

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10 **A coin is tossed 100 times. It lands on heads 63 times. The relative frequency of heads is**

- A 0.68
- B 0.63
- C 0.37
- D 0.58

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11 **The probability of rain is 0.2. The probability of no rain is**

- A 0.2
- B 0.9
- C 0.7
- D 0.8

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12 A fair six-sided die is rolled once. The probability of getting a 4 is

- **A** $\frac{1}{6}$
- **B** $\frac{1}{3}$
- **C** $\frac{1}{4}$
- **D** $\frac{1}{2}$

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13 P(A) = 0.4, P(B) = 0.3, P(A and B) = 0.15. P(A or B) is

- **A** 0.7
- **B** 0.65
- **C** 0.12
- **D** 0.55

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14 **A coin is tossed 50 times. It lands on heads 23 times. The relative frequency of heads is**

- A 0.51
- B 0.41
- C 0.46
- D 0.54

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15 **The probability of rain is 0.4. The probability of no rain is**

- A 0.4
- B 0.5
- C 0.7
- D 0.6

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16 **P(A) = 0.3, P(B) = 0.3, P(A and B) = 0.15. P(A or B) is**

A 0.09

B 0.45

C 0.55

D 0.6

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17 **A coin is tossed 200 times. It lands on heads 91 times. The relative frequency of heads is**

A 0.545

B 0.505

C 0.405

D 0.455

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18 The probability of rain is 0.6. The probability of no rain is

- **A** 0.5
- **B** 0.3
- **C** 0.6
- **D** 0.4

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19 Two dice are rolled. The probability of a total of 7 is

- **A** $\frac{5}{36}$
- **B** $\frac{1}{4}$
- **C** $\frac{7}{36}$
- **D** $\frac{1}{6}$

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20 P(A) = 0.5, P(B) = 0.3, P(A and B) = 0.2. P(A or B) is

- A 0.15
- B 0.8
- C 0.7
- D 0.6

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21 Two dice are rolled. The probability of a total of 8 is

- A $\frac{1}{6}$
- B $\frac{1}{9}$
- C $\frac{5}{36}$
- D $\frac{7}{36}$

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22 **P(A) = 0.4, P(B) = 0.3, P(A and B) = 0.1. P(A or B) is**

- A 0.7
- B 0.8
- C 0.6
- D 0.12

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23 **A coin is tossed 100 times. It lands on heads 37 times. The relative frequency of heads is**

- A 0.42
- B 0.37
- C 0.63
- D 0.32

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24 **Two dice are rolled. The probability of a total of 5 is**

- **A** $\frac{1}{12}$
- **B** $\frac{1}{9}$
- **C** $\frac{5}{36}$
- **D** $\frac{1}{6}$

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25 **A coin is tossed 100 times. It lands on heads 48 times. The relative frequency of heads is**

- **A** 0.43
- **B** 0.48
- **C** 0.53
- **D** 0.52

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ANSWER KEY

1.	A	**10.**	B	**19.**	D
2.	B	**11.**	D	**20.**	D
3.	D	**12.**	A	**21.**	C
4.	D	**13.**	D	**22.**	C
5.	A	**14.**	C	**23.**	B
6.	B	**15.**	D	**24.**	B
7.	D	**16.**	B	**25.**	B
8.	B	**17.**	D		
9.	A	**18.**	D		

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