QUEBEC MATHEMATICS, CULTURAL, SOCIAL AND TECHNICAL OPTION, SECONDARY IV · UNIT D · 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 **Two dice are rolled. The number of outcomes giving the stated sum is 5 out of 36. The number of outcomes not giving it is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An event with probability one half has a prize of 100 dollars. Its expected value in dollars is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The number of combinations of 4 items taken 2 at a time is**

ANSWER _____

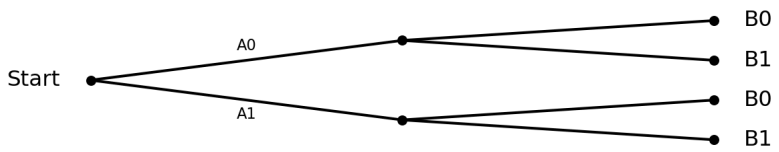
Understand It with Pulse | Flag a mistake

4 **An event has 1 favourable outcome out of 4 equally likely outcomes. Its probability is**

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

Understand It with Pulse | Flag a mistake

5 **A tree diagram has 2 first branches and each splits into 2 branches. The number of outcomes is**



ANSWER _____

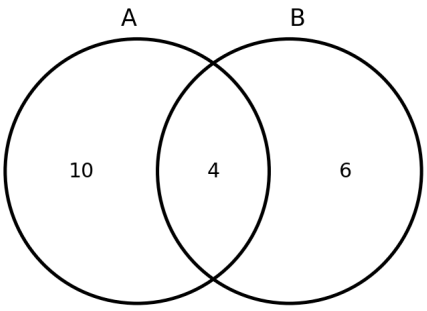
Understand It with Pulse | Flag a mistake

6 **A bag has 20 marbles and 5 are red. The number that are not red is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **The diagram shows sets A and B with 10 in A only 4 in both and 6 in B only. The number in A or B is**



ANSWER _____

Understand It with Pulse | Flag a mistake

8 **An event has 2 favourable outcomes out of 6 equally likely outcomes. Its probability is**

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

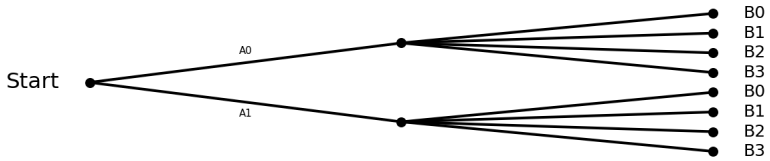
Understand It with Pulse | Flag a mistake

9 **A bag has 2 red marbles and 8 blue marbles. The probability of drawing a red marble is**

- **A** $\frac{1}{2}$
- **B** $\frac{1}{5}$
- **C** $\frac{1}{3}$
- **D** $\frac{2}{5}$

Understand It with Pulse | Flag a mistake

10 **A tree diagram has 2 first branches and each splits into 4 branches. The number of outcomes is**



ANSWER

Understand It with Pulse | Flag a mistake

11 **Two dice are rolled. The number of outcomes giving the stated sum is 6 out of 36. The number of outcomes not giving it is**

ANSWER

Understand It with Pulse | Flag a mistake

12 **An event with probability three quarters has a prize of 80 dollars. Its expected value in dollars is**

ANSWER

Understand It with Pulse | Flag a mistake

13 A bag has 4 red marbles and 6 blue marbles. The probability of drawing a red marble is

- **A** $\frac{2}{5}$
- **B** $\frac{1}{2}$
- **C** $\frac{1}{3}$
- **D** $\frac{3}{5}$

Understand It with Pulse | Flag a mistake

14 A coin is tossed 2 times. The number of possible outcomes is

ANSWER _____

Understand It with Pulse | Flag a mistake

15 The number of permutations of 6 items taken 3 at a time is

ANSWER _____

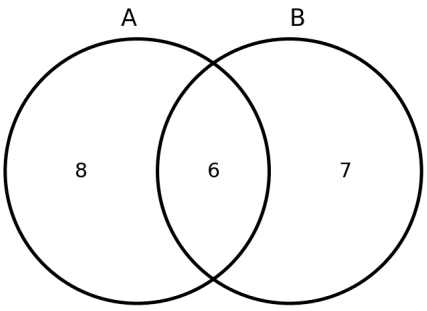
Understand It with Pulse | Flag a mistake

16 **A bag has 50 marbles and 25 are red. The number that are not red is**

ANSWER

Understand It with Pulse | Flag a mistake

17 **The diagram shows sets A and B with 8 in A only 6 in both and 7 in B only. The number in A or B is**



ANSWER

Understand It with Pulse | Flag a mistake

18 **Two dice are rolled. The number of outcomes giving the stated sum is 3 out of 36. The number of outcomes not giving it is**

ANSWER

Understand It with Pulse | Flag a mistake

19 A coin is tossed 3 times. The number of possible outcomes is

ANSWER _____

Understand It with Pulse | Flag a mistake

20 An event has 3 favourable outcomes out of 4 equally likely outcomes. Its probability is

A $\frac{3}{4}$

B $\frac{1}{6}$

C $\frac{1}{3}$

D $\frac{1}{2}$

Understand It with Pulse | Flag a mistake

21 The number of combinations of 8 items taken 3 at a time is

ANSWER _____

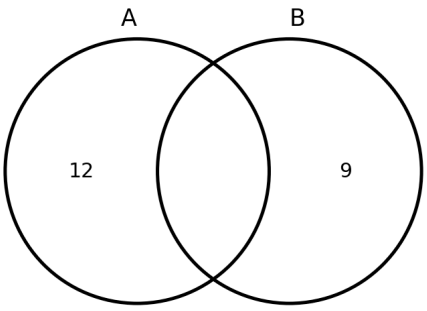
Understand It with Pulse | Flag a mistake

22 The number of permutations of 4 items taken 3 at a time is

ANSWER _____

Understand It with Pulse | Flag a mistake

23 The diagram shows sets A and B with 12 in A only and 9 in B only. There are 24 in total. The number in both A and B is



ANSWER _____

Understand It with Pulse | Flag a mistake

24 The number of combinations of 6 items taken 2 at a time is

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **An event with probability one sixth has a prize of 120 dollars. Its expected value in dollars is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 31
2. 50
3. 6
4. A
5. 4
6. 15
7. 20
8. A
9. B
10. 8
11. 30
12. 60
13. A
14. 4
15. 120
16. 25
17. 21
18. 33
19. 8
20. A
21. 56
22. 24
23. 3
24. 15
25. 20

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