QUEBEC MATHEMATICS, SCIENCE 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 **A bag has 5 red marbles and 7 blue marbles. The probability of drawing a red marble is**

- **A** $\frac{5}{12}$
- **B** $\frac{1}{2}$
- **C** $\frac{1}{3}$
- **D** $\frac{2}{5}$

Understand It with Pulse | Flag a mistake

2 **A coin is tossed 4 times. The number of possible outcomes is**

ANSWER _____

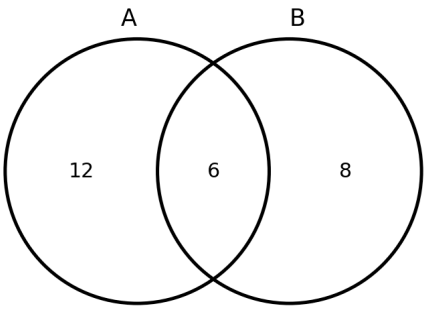
Understand It with Pulse | Flag a mistake

3 **An event has 3 favourable outcomes out of 6 equally likely outcomes. Its probability is**

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

Understand It with Pulse | Flag a mistake

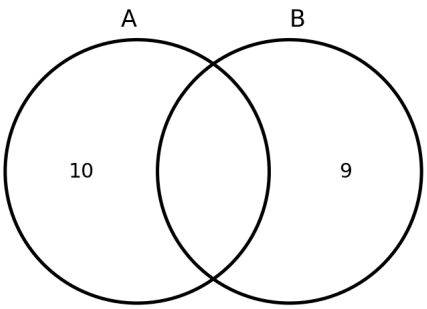
4 **The diagram shows sets A and B with 12 in A only 6 in both and 8 in B only. The number in A or B is**



ANSWER _____

Understand It with Pulse | Flag a mistake

5 **The diagram shows sets A and B with 10 in A only and 9 in B only. There are 27 in total. The number in both A and B is**



ANSWER _____

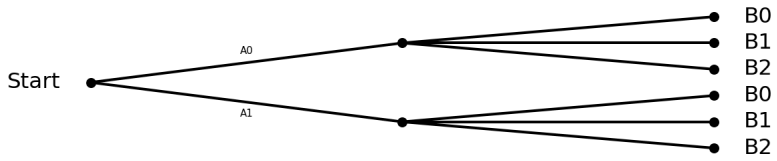
Understand It with Pulse | Flag a mistake

6 **A bag has 50 marbles and 8 are red. The number that are not red is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A tree diagram has 2 first branches and each splits into 3 branches. The number of outcomes is**



ANSWER

Understand It with Pulse | Flag a mistake

8 **A fair die is rolled once. The probability of rolling a 3 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 **An event with probability one half has a prize of 140 dollars. Its expected value in dollars is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **An event with probability one quarter has a prize of 240 dollars. Its expected value in dollars is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **An event with probability one sixth has a prize of 160 dollars. Its expected value in dollars is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **The number of combinations of 7 items taken 2 at a time is**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 The number of permutations of 7 items taken 2 at a time is

ANSWER _____

Understand It with Pulse | Flag a mistake

14 A bag has 7 red marbles and 7 blue marbles. The probability of drawing a red marble is

A $\frac{1}{2}$

B $\frac{1}{3}$

C $\frac{2}{5}$

D $\frac{3}{5}$

Understand It with Pulse | Flag a mistake

15 A coin is tossed 6 times. The number of possible outcomes is

ANSWER _____

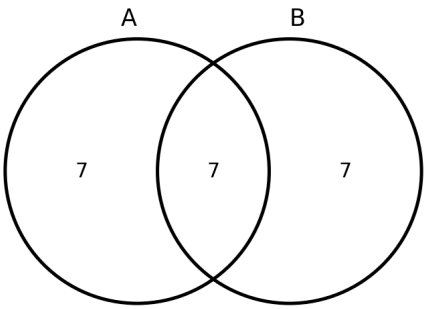
Understand It with Pulse | Flag a mistake

16 **An event has 3 favourable outcomes out of 8 equally likely outcomes. Its probability is**

- **A** $\frac{1}{6}$
- **B** $\frac{3}{8}$
- **C** $\frac{1}{3}$
- **D** $\frac{1}{2}$

Understand It with Pulse | Flag a mistake

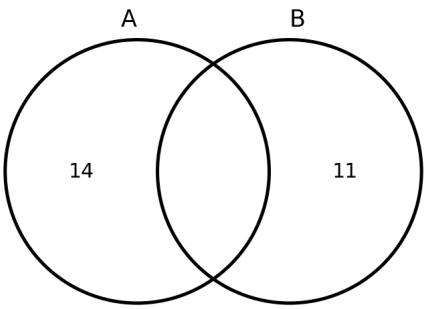
17 **The diagram shows sets A and B with 7 in A only 7 in both and 7 in B only. The number in A or B is**



ANSWER _____

Understand It with Pulse | Flag a mistake

18 **The diagram shows sets A and B with 14 in A only and 11 in B only. There are 30 in total. The number in both A and B is**



ANSWER _____

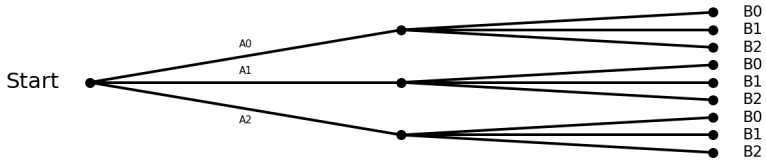
Understand It with Pulse | Flag a mistake

19 **A bag has 40 marbles and 7 are red. The number that are not red is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **A tree diagram has 3 first branches and each splits into 3 branches. The number of outcomes is**



ANSWER

Understand It with Pulse | Flag a mistake

21 **A bag has 6 red marbles and 8 blue marbles. The probability of drawing a red marble is**

A $\frac{3}{7}$

B $\frac{1}{2}$

C $\frac{1}{3}$

D $\frac{2}{5}$

Understand It with Pulse | Flag a mistake

22 **A coin is tossed 5 times. The number of possible outcomes is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

A $\frac{1}{4}$

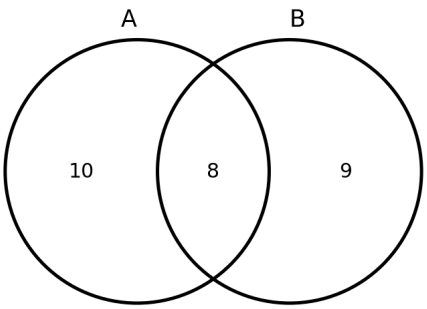
B $\frac{1}{6}$

C $\frac{1}{3}$

D $\frac{1}{2}$

Understand It with Pulse | Flag a mistake

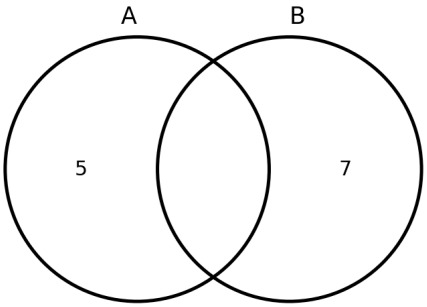
24 **The diagram shows sets A and B with 10 in A only 8 in both and 9 in B only. The number in A or B is**



ANSWER

Understand It with Pulse | Flag a mistake

25 **The diagram shows sets A and B with 5 in A only and 7 in B only. There are 18 in total. The number in both A and B is**



ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. 16
3. A
4. 26
5. 8
6. 42
7. 6
8. B
9. 70
10. 60
11. 26.67
12. 21
13. 42
14. A
15. 64
16. B
17. 21
18. 5
19. 33
20. 9
21. A
22. 32
23. A
24. 27
25. 6

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