ONTARIO MATHEMATICS OF DATA MANAGEMENT, GRADE 12, UNIVERSITY PREPARATION (MDM4U) · UNIT A · 10 QUESTIONS

Counting and Probability — Practice Test

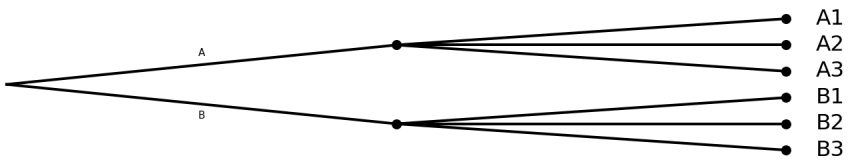
This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The number of ways to choose a president and a secretary from 5 people is**

- A 25
- B 20
- C 10
- D 22

Understand It with Pulse | Flag a mistake

2 **The tree diagram shows all outcomes of two stages. The total number of outcomes is Figure 3**



- **A** 5
- **B** 7
- **C** 6
- **D** 17

Understand It with Pulse | Flag a mistake

3 **The number of permutations of 3 objects chosen from 10 distinct objects is**

- **A** 720
- **B** 240
- **C** 723
- **D** 120

Understand It with Pulse | Flag a mistake

4 **The number of ways to arrange 4 different books in a row is**

A 6

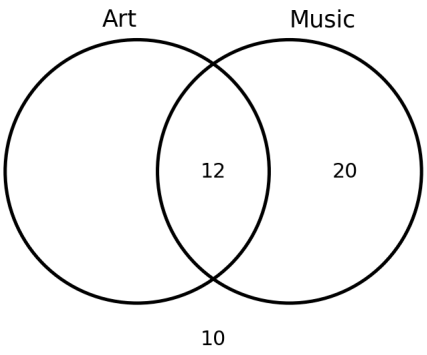
B 24

C 28

D 16

Understand It with Pulse | Flag a mistake

5 **The Venn diagram shows students in two clubs. There are 57 students in total. The number in Art only is Figure 2**



A 12

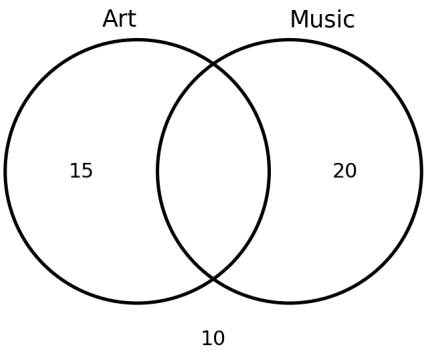
B 20

C 27

D 15

Understand It with Pulse | Flag a mistake

6 **The Venn diagram shows students in two clubs. There are 57 students in total. The number in both clubs is Figure 1**



A 12

B 8

C 20

D 5

Understand It with Pulse | Flag a mistake

7 **Two coins are tossed. The probability of two heads is**

A 1

B 1

C 1

D 3

Understand It with Pulse | Flag a mistake

8 **The number of ways to choose a president and a secretary from 6 people is**

A 36

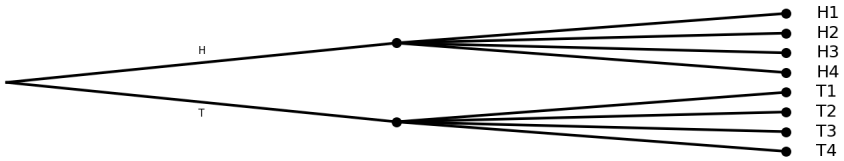
B 15

C 30

D 32

Understand It with Pulse | Flag a mistake

9 **The tree diagram shows all outcomes of two stages. The total number of outcomes is Figure 4**



- **A** 6
- **B** 9
- **C** 8
- **D** 7

Understand It with Pulse | Flag a mistake

10 **The number of ways to choose a president and a secretary from 3 people is**

- **A** 9
- **B** 3
- **C** 8
- **D** 6

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. B
2. C
3. A
4. B
5. D
6. A
7. B
8. C
9. C
10. D

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