ONTARIO FUNCTIONS, GRADE 11, UNIVERSITY PREPARATION (MCR3U) · UNIT D · 10 QUESTIONS

Discrete Functions — 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 sequence is defined by $t_1 = 6$ and $t_n = 2\,t_{n-1}$ The third term is**

- A 24
- B 12
- C 48
- D 25

Understand It with Pulse | Flag a mistake

2 **The sum of the entries in row 4 of Pascal triangle is**

- A 8
- B 27
- C 16
- D 18

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3 **The sum of the entries in row 5 of Pascal triangle is**

A 10

B 25

C 34

D 32

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4 **The sum of the entries in row 6 of Pascal triangle is**

A 64

B 12

C 36

D 66

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5 The sum of the entries in row 3 of Pascal triangle is

- A 6
- B 8
- C 9
- D 10

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6 For the sequence defined by $t_n = 2n^2$ the second finite difference is

- A 2
- B 8
- C 4
- D 6

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7 For the sequence defined by $t_n = 3n^2$ the second finite difference is

- A 3
- B 12
- C 8
- D 6

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8 For the sequence defined by $t_n = 4n^2$ the second finite difference is

- A 8
- B 4
- C 16
- D 10

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9 **For the sequence defined by $t_n = n^2$ the second finite difference is**

- **A** 2
- **B** 1
- **C** 4
- **D** 13

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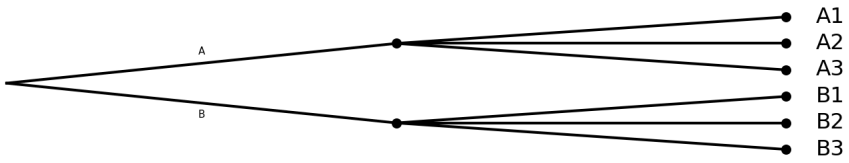
10 **The tree diagram shows all outcomes of two stages. The total number of outcomes is Figure 1**



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

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ANSWER KEY

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

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