ONTARIO ADVANCED FUNCTIONS, GRADE 12, UNIVERSITY PREPARATION (MHF4U) · UNIT A

Polynomial and Rational Functions — Practice Test

Ontario Advanced Functions, Grade 12, University Preparation (MHF4U) • 10 questions

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 zeros of y = (x - 3)(x + 1) are**

- **A** x = 3, x = 1
- **B** x = -3, x = -1
- **C** x = 1, x = -1
- **D** x = 3, x = -1

Understand It with Pulse | Flag a mistake

2 When $P(x) = x^2 + 2x + 3$ is divided by $x - 1$ the remainder is

- A 6
- B 5
- C 7
- D 3

Understand It with Pulse | Flag a mistake

3 As x approaches positive infinity, the graph of $y = -x^5$ approaches

- A positive infinity
- B negative infinity
- C zero
- D one

Understand It with Pulse | Flag a mistake

4 The vertical asymptote of y = 1/x - 4 is x equal to

- A 5
- B -4
- C 0
- D 4

Understand It with Pulse | Flag a mistake

5 The zeros of y = (x - 4)(x + 1) are

- A x = 4, x = -1
- B x = 4, x = 1
- C x = -4, x = -1
- D x = 1, x = -1

Understand It with Pulse | Flag a mistake

6 **When $P(x) = x^2 + 3x + 1$ is divided by $x - 1$ the remainder is**

- A 4
- B 6
- C 1
- D 5

Understand It with Pulse | Flag a mistake

7 **As x approaches positive infinity, the graph of $y = -x^2$ approaches**

- A positive infinity
- B zero
- C negative infinity
- D one

Understand It with Pulse | Flag a mistake

8 The vertical asymptote of y = 1/x - 5 is x equal to

- A 5
- B 6
- C -5
- D 0

Understand It with Pulse | Flag a mistake

9 The zeros of y = (x - 6)(x + 1) are

- A x = 6, x = 1
- B x = -6, x = -1
- C x = 6, x = -1
- D x = 1, x = -1

Understand It with Pulse | Flag a mistake

10 When $P(x) = x^2 + 4x + 2$ is divided by $x - 1$ the remainder is

- **A** 6
- **B** 7
- **C** 8
- **D** 2

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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