IOWA ALGEBRA 2 · UNIT 2 · 10 QUESTIONS

Polynomials and Rational 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 In simplest form, $\frac{x^2 - 25}{x + 5}$, for $x \neq -5$, is

- **A** x - 5
- **B** x + 25
- **C** x - 25
- **D** x + 5

Understand It with Pulse | Flag a mistake

2 For $(x + 3)^3(x - 1)$, the multiplicity of the zero -3 is



A 3

B 4

C 1

D 2

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3 **As $x \to -\infty$, the value of $2x^3 + x$ approaches**



A 2

B positive infinity

C negative infinity

D 0

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4 The graph of $y = \frac{x^2 - 9}{x + 3}$ has a hole at

- **A** x = 3
- **B** x = -3
- **C** x = 9
- **D** y = -3

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5 The quotient of $(x^2 - 5x + 6) \div (x - 2)$ is

- **A** x + 3
- **B** x - 3
- **C** x + 2
- **D** x - 2

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6 The zeros of $x^2 + 9$ are

- A 9, -9
- B none
- C 3, -3
- D 3i, -3i

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7 The sum $\frac{2}{x} + \frac{3}{x}$ is

- A $\underline{1}$
- B $\underline{5}$
- C $\underline{6}$
- D $\underline{5}$

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8 The solution of $\frac{4}{x} = 2$ is

- **A** x = 8
- **B** x = 4
- **C** x = 2
- **D** x = 1

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9 The graph below shows $y = x^3 - 3x$. The sum of its zeros is

ANSWER _____

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10 **The product of the zeros of $x^2 - 4x + 3$ is**

A -4

B 3

C -3

D 4

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ANSWER KEY

1. A
2. A
3. C
4. B
5. B
6. D
7. B
8. C
9. 0
10. B

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