ALABAMA ALGEBRA II WITH STATISTICS · 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

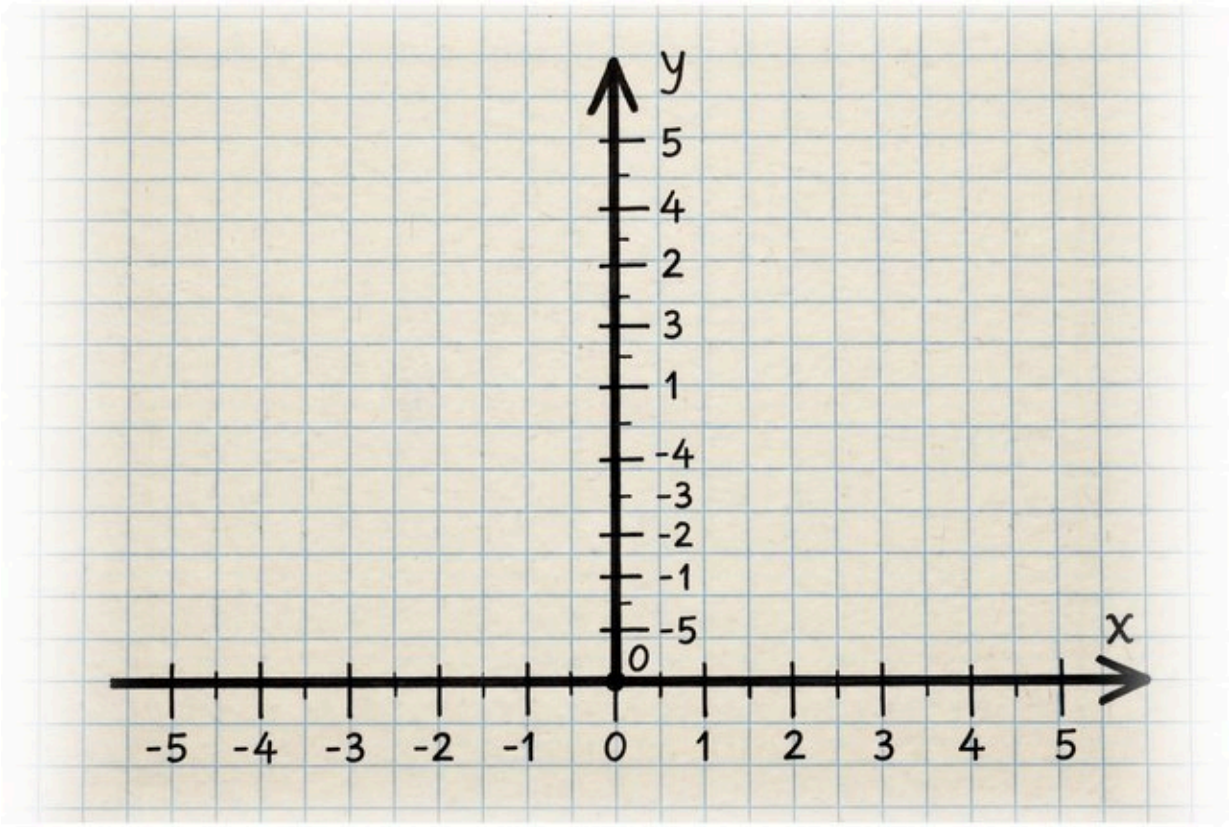
Understand It with Pulse | Flag a mistake

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

- A 2
- B positive infinity
- C negative infinity
- D 0

Understand It with Pulse | Flag a mistake

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

Understand It with Pulse

Flag a mistake

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

Understand It with Pulse | Flag a mistake

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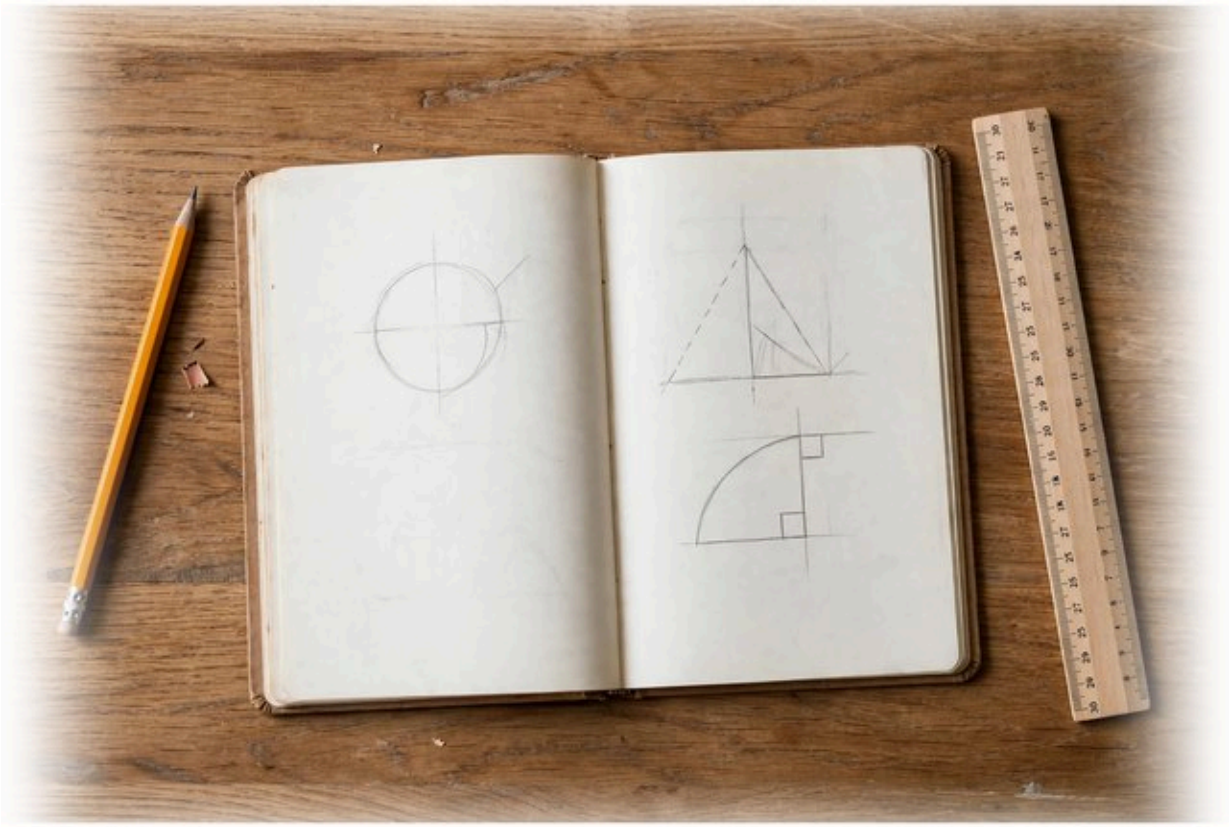
8 The solution of $\frac{4}{x} = 2$ is



A x = 8

B x = 4

C x = 2

D x = 1

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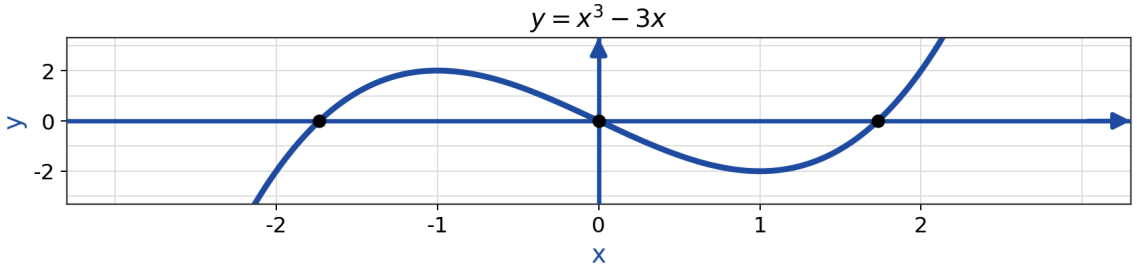
9 The graph below shows $y = x^3 - 3x$. The sum of its zeros is



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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