NORTHWEST TERRITORIES FOUNDATIONS OF MATHEMATICS AND PRE-CALCULUS 10 (MFMP-10) · UNIT B · 10 QUESTIONS

Polynomials and Factoring — 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 **When expanded and simplified, $(2x + 5)^2$ is equal to**

- A $4x^2 + 25$
- B $4x^2 + 20x + 10$
- C $4x^2 + 20x + 25$
- D $4x^2 + 10x + 25$

Understand It with Pulse | Flag a mistake

2 **When factored completely, $4x^2 + 12x + 9$ is equal to**

- A $(2x + 3)(2x - 3)$
- B $(2x + 3)^2$
- C $(2x - 3)^2$
- D $(4x + 3)(x + 3)$

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3 **When factored completely, $2x^2 - 5x - 3$ is equal to**

- A $(2x - 1)(x + 3)$
- B $(x - 1)(2x - 3)$
- C $(2x + 3)(x - 1)$
- D $(2x + 1)(x - 3)$

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4 **When factored by grouping, $2x^2 + 4x + 3x + 6$ is equal to**

- A $(2x - 3)(x - 2)$
- B $(2x + 3)(x + 2)$
- C $(2x + 2)(x + 3)$
- D $(x + 2)(x + 3)$

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5 **When factored completely, $12x^2 + 18x$ is equal to**

- A $3x(4x + 6)$
- B $6(2x^2 + 3x)$
- C $2x(6x + 9)$
- D $6x(2x + 3)$

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6 **The parabola $y = x^2 - 4x + 3$ crosses the x-axis at 1 and 3. The factored form of $x^2 - 4x + 3$ is**

- A $(x - 1)(x - 3)$
- B $(x + 1)(x + 3)$
- C $(x - 1)(x + 3)$
- D $(x + 1)(x - 3)$

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7 **When simplified, $(3x + 1)(x - 2) + 2x$ is equal to**

- A $3x^2 - 3x + 2$
- B $3x^2 + 3x - 2$
- C $3x^2 - 3x - 2$
- D $3x^2 - 5x - 2$

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8 **When factored completely, $x^2 - 81$ is equal to**

- A $(x - 9)(x + 9)$
- B $(x - 9)^2$
- C $(x + 9)^2$
- D $(x - 81)(x + 1)$

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9 **The constant term in the expansion of (x + 6)(x - 4) is ____.**

ANSWER _____

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10 **When factored completely, $5x^2 - 5$ is equal to**

A (5x - 5)(x + 1)

B 5(x - 1)(x + 1)

C $5(x - 1)^2$

D $5(x^2 - 1)$

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ANSWER KEY

1. C
2. B
3. D
4. B
5. D
6. A
7. C
8. A
9. -24
10. B

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