PEP Grade 8 Math — Unit 14: Multiplying Polynomials and Factoring · Unit Test (Basic)

PEP · Grade 8 · Term 1 · Mathematics · Unit Test · Basic

AI-generated practice paper · original study aid, not an official examination paper · 40 questions · 100 points

Name: _____ Date: _____ Score: _____

Answer all questions. This paper is worth 100 points. Show your working where appropriate.

I. Multiple Choice

1. Which of the following is the correct expansion of (x + 3)(x - 2)?
   A. x^2 + x - 6
   B. x^2 - x - 6
   C. x^2 + x + 6
   D. x^2 - x + 6

2. What is the result of multiplying 2x^2 by 3x?
   A. 5x^3
   B. 6x^3
   C. 6x^2
   D. 6x

3. Which expression is equivalent to 4a^2b - 8ab^2 after factoring?
   A. 4ab(a - 2b)
   B. 4ab(a - b)
   C. 4ab(4a - 8b)
   D. 4a^2b - 8ab^2

4. Simplify: (3x + 4) - (2x - 5).
   A. x - 1
   B. x + 9
   C. 5x - 1
   D. 5x + 9

5. What is the product of (x + 1)(x + 1)?
   A. x^2 + 1
   B. x^2 + 2x + 1
   C. x^2 + 2
   D. x^2 + 2x

6. Which term should be added to x^2 + 6x to make it a perfect square trinomial?
   A. 3
   B. 6
   C. 9
   D. 12

7. Factorise: y^2 - 25.
   A. (y - 5)^2
   B. (y - 5)(y + 5)
   C. (y + 5)^2
   D. (y - 25)(y + 25)

8. What is the value of 2x^2y when x = 3 and y = 2?
   A. 12
   B. 18
   C. 36
   D. 72

9. Which of the following expressions is not factorised completely?
   A. 3(x + 4)
   B. x(x - 1)
   C. 2a^2 - 4a
   D. 5m^2n - 10mn

10. If (x + 2)(x - 4) = 0, what are the possible values of x?
    A. 2 and 4
    B. -2 and 4
    C. 2 and -4
    D. -2 and -4