Additional Problems: Structures of Expressions

**Adding & Subtracting Polynomials**

1. If A = 7x + 5y^2 – 9 and B = 3 + 4y^2 – 6X, find A+B
2. If A = 2m + 3n^2 -5 and B = 4 – 2n^2 + 7m, find A+B
3. Add the polynomial expressions (4x^2 -3x + 5) + (2x^2 + x – 3)
4. Add the polynomial expressions (6 + 3x – 4x^2) + (2x^2 – x + 7)
5. Is the difference of 10x + 5 and 2 – 5x^2, 50x^2 + 3?
6. Subtract the second polynomial from the first (7a^3 – 4a -1) – (3a^2 + 5a + 4)
7. Show a sum that demonstrates that polynomials form a closed system under addition.
8. What is (4x^2 – 1) + (3 – 3x)?
9. Simplify (8b^2 – 5b + 1.75) + (1.25b^2 + 4b -2)
10. Simplify (5a^2 – 4a + 3.5) + (2.5a^2 + 3a – 1.25)