College Mathematics

QUIZ (CHAPTER 7.6)

A. Directions: Find each sum or difference. Make sure to SHOW ALL WORK.

(1) $(3x^2 - 4x + 5) + (-2x^2 + 3x - 2)$

(2) $(3x^2 - 4x + 5) - (-2x^2 + 3x - 2)$

(3) $(12x^2 - 8x + 6) - (3x^2 - 2x + 4)$

(4) $5(2x^2 - 3x + 7) - 2(6x^2 - x + 12)$

B. **Directions: Find each product. SHOW ALL WORK.**

(5) $(x + 4)(x - 9)$

(6) $(4x - 13)(7x + 12)$

(7) $(7x - 9)^2$

(8) $(x + 5)(12x^3 - 3x^2 + x + 1)$

(9) $(x + 2)(x + 6)(x + 8)$

C. Directions: Factor each polynomial. SHOW ALL WORK.

(10) $x^2 - 12x + 35$

(11) $x^2 - 169$

(12) $12x^2 - 84x + 120$

(13) $6x^3 + 24x^2 + 18x$

(14) $48x^4 + 20x^3 - 8x^2$

(15) $25x^2 - 169y^2$