MATD 0370 - Elementary Algebra - Summer

Written Homework 5 - Show all work to receive credit.

Subtracting Polynomials (Section 4.4)

1) Subtract and simplify. $(-2x^3 - 3x^2 + 4x + 2) - (-x^3 + 6x^2 - 7x - 11)$

Name_

Multiplying Polynomials (Sections 4.4, 4.5, 4.6)

Multiply and simplify. Show your steps.

2)
$$(5x-6)(2x+8)$$

3) $(3y-4)^2$

4)
$$(2m+7y)(2m-7y)$$

5)
$$(5x^2 - xy - y^2)(2x + 3y)$$

Factoring (Sections 5.1 and 5.2)

Remember to always look first for a common factor and write in descending order.

6) Factor by grouping: $10x^3 + 8x^2 - 5x - 4$

7) Factor completely: $m^2 - 5m - 14$

8) Factor completely: $7x - 60 + x^2$

9) Factor completely: $3y^2 - 9y - 84$