

5.1 – 5.4 Final Quick Review

1. Complete the following table:

<u>Polynomial</u>	<u>Coefficient(s)</u>	<u>Constant</u>	<u>Variable(s)</u>	<u>Classification</u>	
				<u>Type of Polynomial</u>	<u>Degree</u>
a) $7x^2 + 9$	7	9	x	BINOMIAL	2 ND
b) $3a^3 - 9b^2 - 4$	3, -9	-4	a, b	TRINOMIAL	3 RD

2. Simplify the following:

a) $\underline{6n^3} - \underline{8n^2} + \underline{4n^3} - \underline{3n^2} + 7$
 $10n^3 - 11n^2 + 7$

b) $\underline{-3n^2} - \underline{4} + \underline{7n} + \underline{6n^2} - \underline{3n} + \underline{9}$
 $3n^2 + 4n + 5$

3. Add the following polynomials:

a) $\underline{(3n + 6n^2 - 1)} + \underline{(7 - 5n + 3n^2)}$
 $9n^2 - 2n + 6$

b) $\underline{(-8n^2 - 3 + 5n)} + \underline{(4n - 5 + 3n^2)}$
 $-5n^2 + 9n - 8$

4. Subtract the following polynomials:

a) $(7n + 4) - (7 + 3n)$
 $7n + 4 - 7 - 3n$
 $4n - 3$

b) $(9n^2 - 4n + 2) - (-7n^2 + 4n - 5)$
 $9n^2 - 4n + 2 + 7n^2 - 4n + 5$
 $16n^2 - 8n + 7$

5. The solution to the addition of 2 polynomials is $-6n^2 + 4n - 9$.
 One of the polynomials is $3n^2 - 6n + 1$.
 What is the other polynomial?

$$(3n^2 - 6n + 1) + (-9n^2 + 10n - 10) = -6n^2 + 4n - 9$$