

Algebra 2/Trig: STARTER PRACTICE 6.1-6.2

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SHOW YOUR WORK in a **CLEAR** and **ORGANIZED** manner and write LEGIBLY too. If I can't understand the flow of your work, then that's not clear and if I can't understand your handwriting, then that's not legible. **NO WORK, NO CREDIT.** **BOX** the final answers.

1) Rewrite in standard form. Then identify the leading coefficient, degree, and the number of terms. Classify the polynomial. **(15 points)**

a) $3x^2 + 6x^3 - 5x^5$

b) $4x^5 - 3x + 7x^4 + 2x^3$

c) $-6x^3 + 2x - 3x^4$

	Standard Form	Leading Coeff.	Degree	# of Terms	Classification
a)					
b)					
c)					

2) Add or subtract. Write your answer in standard form. **(3 points each)**

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

b) $(3a^2 - ab - 7) + 2(5a^2 + ab + 8) - 3(-2a^2 + 3ab - 6)$

3) Find each product. Write your answer in standard form. **(3 points each)**

a) $(x - y)(x^2 + xy + y^2)$

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

4) Expand each expression. **(3 points each)**

a) $(5x - 2y)^3$

b) $(4a - 3b)^5$