

### PROBLEM SET #1

A) Simplify B) Name the polynomial C) State the degree

1)  $(3x^2 + 6x - 10) + (4x^3 - 3x^2 + x + 10)$

2)  $(9x^6y^2 - 7x^4y + 6x + 2) - (3x^6y^2 - 4x^4y - 7)$

3)  $(6x^3y^8 + 2xy^3 + 7) + (16x^3y^8 - 2xy^3 - 7)$

Write each polynomial in descending order according to x.

4)  $18x^8 + 6x^4 - 10x^5 + 13 - x^7$

5)  $4y^4 + 7x^3y^2 - 11x^7y$

### PROBLEM SET #2

Simplify. Show one work step.

6)  $7x^2y(6x^3 + x^2y^3 - 7xy + 9)$

7)  $\frac{1}{4}xy^5(16x^7y^9 - 32x^3y^3)$

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

### PROBLEM SET #3

Solve and check.

9)  $(x^2 + 6x - 7) - (x^2 + 5x + 2) = -17$

10)  $9x + 7(x + 1) = 47 - 4x$

11)  $\frac{1}{4}(12x + 16) = 10 - 3(x + 6)$

PS #1 \_\_\_\_\_

1)	2)	
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A)		
B)		
C)		
3)	4)	
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A)	5)	
B)	<hr/>	
C)		

PS #2 \_\_\_\_\_

6)	7)	
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8)		
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9)	10)
√	√
11)	√