

**Algebra 2H**  
**Section 0-2: Practice Worksheet**

Name \_\_\_\_\_

Rewrite each polynomial in standard form *under the original problem* and fill in the chart.

	<b>Polynomial</b>	<b>Leading Coefficient</b>	<b>Degree</b>	<b>Classify by Degree</b>	<b>Classify by # of Terms</b>
1.	$4 - 7x + 4x^2$				
2.	$-x^3 + 2$				
3.	$6x^4$				
4.	$3x - 5x^2 + 4 + 2x^3$				

Add or subtract the polynomials.

5. $(3x^2 - 4x + 1) - (-5x^2 + x - 9)$	6. $-(x^2 - 7) - (2x^2 + 2)$	7. $(2x - 8x^2 - 3) + (x^3 - 5x - 5x^2)$
--	------------------------------	--

8. Projected from 1950 through 2010, the female population  $F$  and the male population  $M$  of the United States (in thousands) can be modeled by the following equations, where  $t$  is the number of years since 1950.

$$F = 1223.58t + 79,589.03$$

$$M = 1164.16t + 75,622.43$$

(a) Find a model that represents the total population  $T$  of the United States from 1950 through 2010.

(b) Use your answer from part (a) to approximate the total population of the United States in 1990.

Find each product.

9. $(x + 8)(2x - 1)$	10. $(3x + 2)^2$
11. $(6x - 5)(6x + 5)$	12. $(2x + 3)(x^2 - 4x + 2)$
13. $(4x^2 - x + 5)(x + 4)$	14. $(4x - 8)(x + 8)$
15. $(3x - 4)(5x - 9)$	16. $(3x - 4)(5x + 9)$
17. $(3x - 4)(-5x - 9)$	18. $2x(3x + 4)(5x + 7)$
19. $(x^2 + 4x - 2)(x^2 - 7x + 3)$	