Math 10 – Unit 6 – 9.1 to 9.3; 10.1 to 10.5

To the Test – be sure to bring:

- (1) your personally-prepared 8 ½ " by 11" study guide for this test
- (2) your simple, non-graphing calculator and
- (3) your pencils
- (4) your BluGold ID
- 1. According to the chart, approximately what percent of the Alpha team (the top bar in each set) received a grade of BB-C+C? (Round your answer to the nearest 5%.)



Using the following line graph and the table, is the following statement TRUE or FALSE.
We could "predict" that the cost of a first-class stamp on January 1, 2000 would be 50 cents.



3. Give the coordinates of points P, Q, R, and S.



4. Graph and label the points corresponding to A (4, -2), B (-2, 0), C (-3, 4), D (0, -4), E (1, 3), F (-2, -3)



5. Which of the following points are solutions for the equation: Complete the ordered pairs so that each is a solution for the equation: 6x - y = 5.

6. Consider the line y = 6x - 5Complete the table of values that are solutions for the line.

Х	Y
-1	
0	
1	



7. Graph the line: y = 3x - 1 Plot <u>at least two</u> solution points, then graph the line.













8. Simplify the expression:  $5x^2 \bullet 4x^4$ 

9. Simplify the expressions: 
$$(3x^6)^4$$
  $\frac{x^7}{x^3}$ 

10. Find the value of  $3x^2 - 4x + 5$  when x = 2

$$k(x) = 4x^2 - 2x + 6$$
 What is k(5)?

11. Perform the indicated operations.

$$(3x^2 - 6x + 9) + (2x^2 - 5x - 1)$$

$$(5x^2 - 6x - 8) + (3x^2 - 9x + 15)$$

$$(7x^3 - 6x^2 - 9x) - (10x^2 + 3x + 12)$$

12. Perform the indicated operations. 4x - (-6x + 8)

13. Perform the indicated operations. Be careful.  $(3x^2 - 4x + 9) - (2x^2 - 5x - 1)$ 

14. Multiply 
$$(4x^2y^3)(-6x^2y^5)$$

15. Multiply: 
$$7g^7(3g^3+8g)$$
 Multiply:  $7a^4-3a$  by  $8a^3$ 

16. Multiply: (3x-8)(7x+1)

17. Multiply: 
$$3x(5x-7)(2x+6)$$

18. What is the Greatest Common Factor (GCF) of  $15x^2$  and 10x ?

19. Factor completely : 
$$15a^4 - 45a^3 + 30a^2$$

20. Factor completely: 
$$16x^7 + 48x^6 + 160x^5$$