**Academic Algebra 2**

**Pretest Matrices**

1. Find the product of $\left[\begin{matrix}0&4\\-5&2\end{matrix}\right]$

2. Find the dimensions of the product of matrices

 A. 2 x 4 with a 4 x 7 = \_\_\_\_\_\_\_\_\_\_\_\_

 B. 5 x 3 with a 5 x 3 = \_\_\_\_\_\_\_\_\_\_\_\_

 C. 6 x 2 with a 2 x 1 = \_\_\_\_\_\_\_\_\_\_\_\_

 D. 2 x 1 with a 1 x 2 = \_\_\_\_\_\_\_\_\_\_\_\_

3. Find *n* in the matrix equation, .

4. Find the inverse of A =, if it exists.

5. Let *A* =  and *B* =. Find *A* + 5*B.*

6. Find.

**7.** Find the determinant of each 2 x 2 matrix:

   $\left[\begin{matrix}\frac{1}{2}&20\\\frac{3}{4}&8\end{matrix}\right]$ $\left[\begin{matrix}-10&\frac{2}{5}\\35&15\end{matrix}\right]$

8. Find the product of .

9. Find the values of w,  that make the statement  true.

10. Solve the system of linear equations,  using Cramer’s Rule.

EQUATIONS REVIEW

11. Solve the absolute value equation $\left|3x+5\right|=9$

 {Remember, to solve an absolute value equation, you write the equation TWICE…one positive, one negative}

12. Solve the equation: 7(4x – 5) + 20 = 19 – 8x + 11

13. Solve the equation: $\frac{3}{4}x+44=62$

14. Solve the equation: $\frac{5}{2x+7}=\frac{9}{8-2x}$ {Hint: Cross Multiply}