# **PreCalc** – Ch-6 Review ***– Answer Key***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Perform the following matrix multiplication without a graphing calculator. | | | | | | | |
|  | | | | |  | | |
|  | | | | |  | | |
| 1. Solve for the missing letters. | | | | | | | |
|  | | | | |  | | |
|  | | | | |  | | |
| 1. Solve the following for x and y without a graphing calculator | | | | | | | |
|  | | | | |  | | |
| 1. Verify that is the inverse of & indicate why it is or it is not (**by hand – no GC).** | | | | | | | |
|  | | | |  | | | |
| **Yes, they are inverses (AB and BA = *I*)** | | | | | | | |
| 1. Solve the system of equations without a graphing calculator using matrices | | | | | | | |
|  | | | |  | | | |
|  | | | |  | | | |
| 1. Find the determinant, then find the inverse, if it exists **(by hand – no GC).** | | | | | | | |
|  | |  | | |  | |  |
|  | | | | |  | | |
| 1. Solve the following system using matrices (you can use a calculator, but clearly show your work & process). | | | | | | | |
|  | | |  | | | | |
|  | | |  | | | | |
|  | | | | |  | | |
| 1. The sum of three numbers is 6. The third number is the sum of the first and second numbers. The first number is one more than the third number. Write a matrix equation that would find the three numbers and then solve **(GC okay).** | | | | | | | |
| 1. A computer repair company charges two different hourly rate, one for during the day and one at night. On a particular project, they were contracted 11 hours during the day and 5 hours at night and charged $370. On another project, they were contracted 9 hours during the day and 2 hours at night and charged $240. What is their hourly rate during the day? What is their hourly rate at night?   **x (day) = 20, y (night) = 30** | | | | | | | |