Name _____   **Date** _____

Advanced Algebra II – Assignment 4-1

Use the matrices A, B and C for Problems 1-6

$$A = \begin{Bmatrix} -2 & 3 \\ 4 & -5 \end{Bmatrix} \qquad B = \begin{Bmatrix} 5 & 1 \\ 1 & 5 \end{Bmatrix} \qquad C = \begin{Bmatrix} 1 & -1 \\ -1 & 1 \end{Bmatrix}$$

1.   A + B   2.   B + A   3.   A – C

4.   C – A   5.   B + B   6.   A + C - B

7.   Premier Plumbing changes $40 for a service call plus $70 an hour for labor. Fix-It-Fast charges $66 dollars an hour for labor and charges $125 for a service call, but there is no charge for the first hour of labor. When is the total price the same for both companies?

8.   For his cleaning business Jimmy bought 17 drums of cleaning fluid from two different companies. One of the fluids costs $38 a drum while the other costs $26 per drum. He remembers that he spent a total of $514, but can't remember how many drums he bought from each company. Write a system of equations to represent this situation. Then solve it to let Jimmy know how many drums he bought from each company.