MATD 0370 – Elementary Algebra - Summer   Name_____
Written Homework 9 - Show all work to receive credit

Systems of Equations (Section 7.3)

You must be able to solve systems of equations using each method. On the exam, a specific method will be specified for some problems. So practice both substitution and elimination.

1) Solve using elimination: $\begin{aligned} 3x - 2y &= -7 \\ 4x + 3y &= 2 \end{aligned}$

Word Problems with Systems of Equations (Sections 7.2, 7.3, 7.4)

For each problem you need to define your variables, set up two equations, solve using substitution or elimination, and identify your answers with appropriate labels or units.

2) Two angles are complementary. One angle measures 6° less than twice the measure of the other. Find the measure of each angle.

3) Daniela charges $20 for a private tap lesson and $12 for a group class. One Wednesday, Daniela earned $216 from 14 students. How many students of each type did she teach?

4) A company rents vans and pickup trucks. A van costs $20 a day plus $0.32 a mile. A pickup truck costs $25 a day plus $0.25 a mile. For what mileage is the cost the same?