HOMEWORK, CHAPTER 4, MATH 90

Section 4.1 Systems of Equations and Graphing

1. What two properties are necessary if two linear equations have a single unique solution? Consistent, Inconsistent, Dependent , Independent.

2. Can two equations that plot parallel lines ever have a solution?

PROBLEMS: (Use quad-ruled paper AND straight edge) : 9, 10, 13, 17-35(odd), 43 and 45

Section 4.2 The Substitution Method

1. Describe how we might find a solution to a pair of equations without graphing.

PROBLEMS: 5-29 (odd), 37, 43, 46, 48

Section 4.3 Systems of Equations- elimination method

1. You have just made an attempt to eliminate a variable and the resulting equation is 0=0. What does this indicate?

2. What would it indicate if the resulting equation were 0=3?

3. What is the LCM of 2 and 3?

PROBLEMS: 5-21 (odd), 41, 43, 45, 49

Section 4.4 Applications using systems

This section discusses three types of problems: TOTAL VALUE PROBLEMS; MIXTURE PROBLEMS and MOTION POBLEMS. The mixture problems and total value problems are quite similar in that both types involve computing the total value of two quantities. The motion problems all involve some application of the rate formula: $d = rt$ where d is distance , r is rate and t is time. In all of these problems you must watch the units.. don't mix cents and dollars or minutes and hours.

PROBLEMS: TOTAL VALUE: 3, 4, 6, 8 and 14. MIXTURE: 19, 20, 21, 22 and 23. MOTION: 35, 36, 37, 38, 39

Section 4.5 Solving Equations by Graphing.

This section introduces us to a graphical technique for solving equations that may not be amenable to analytical techniques.

PROBLEMS: 7, 9, 12, 14, 17, 19, 20, 23, 25, 31, 35