## Pre-Algebra
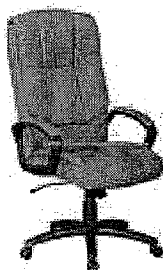### Problem Solving – Problems with 2 unknowns: 1 variable
### After Power Point Day 1

Show all the steps including Let X =, an equation and then show the steps for solving the equation.  Be sure to label your answers with units.

1)      In Germany, about twice as many cars are manufactured per day than in Spain.  If the total number of these cars manufactured per day is 19,827, find the number manufactured in Spain and the number manufactured in Germany.

2)      2) At Jordan's Furniture, a leather chair costs $20 less than an office desk.  If together they cost $195, <u>what is the cost of the leather chair</u>? (Alex Bugajski)

3)      There are 36 different nail polish colors.  There are 6 more shades of pinks than there are shades of red.  <u>How many shades of each color are there?</u>  (May Sullivan)
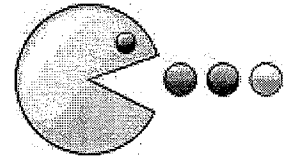
4)     Archaeology Group A has already uncovered a certain number of artifacts, but Archaeology Group B uncovered thirteen more than 4 times what Group A did. If they combined their treasure, they would have a total of thirty-three artifacts. How many artifacts do Archaeology Groups A and B have individually? (R.J. Tocci)
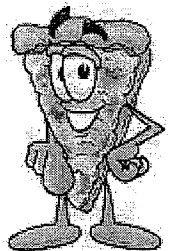
5)     Michael and Arnold love to play Pacman. The highest level Michael got up to is eight levels higher than the highest level Arnold got to. If their added total highest levels equal fourteen, what is Arnold's highest level? (R J Tocci)
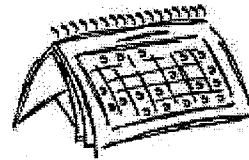
6)     My father eats 4 less than 4 times the number of pieces of pizza I eat. Together, one night we finished 2 pizzas, each pizza having 8 slices in it. How much pizza did my Dad eat? (Rose Wiklund)

7) A tractor and a plow attachment are worth $1200. The tractor is worth seven times as much money as the plow. Find the value of the tractor and the value of the plow.

8) In a 180-day school year, Julie was on time 2 days less than 12 times the number of days she was absent, tardy or dismissed early. How many times was she absent, tardy or dismissed early? (Rose Wiklund)

9) Together a soccer uniform and cleats cost $150. The uniform costs $20 more than the cleats. Find the cost of the cleats on their own. (Emily McGlame)
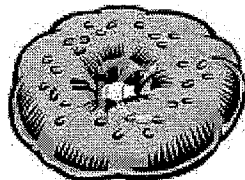
10) The cost of a frappe is $3 more than 2 times the cost of a kiddie cone. A frappe costs $6. How much is a kiddie cone? (Delaney Lawson)
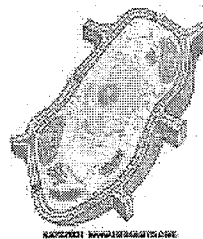
11) Edward Cullen had many fan emails on Monday at 9:00 a.m. At 9:30 a.m. that same morning he had received twice as many more than at 9:00. He had a total of 158,214 emails. How many emails did he have at 9:00? (Delaney Lawson)

12) Bob went to Blue Moon for breakfast and was extremely hungry. His baker's dozen (13) bagels cost $8 more than his 4 chocolate chip muffins. His bill was $24, so how much did **one** chocolate chip muffin cost? (Kate Thomas)



13) The number of organelles in cells of bacteria are 5 less than ½ of the number of organelles in an animal cell. If there are 25 organelles total in both types of cells, how many organelles are in an animal cell? (Alex Bugajski)



14) During the 2006 Men's NCAA Division I basketball championship game, the UCLA Bruins scored 16 fewer points than the Florida Gators. Together, both teams scored a total of 130 points. How many points did the 2006 Champion Florida Gators score during this game?