**Word Problems with Solving Systems of Equations**

**Steps:**

- First need to label your variables (x & y)
  - What does X represent?
  - What does Y represent?
- Create system of equations: need two equations!
- Solve the system of equations using any of the 3 methods.
- Write answers for X & Y with units, not as an ordered pair.
Claire & Tatum went to Water & Ice yesterday after school and got some candy. Their favorite candies are Sour Patch Kids & Skittles. Tatum bought 4 bags of sour patch kids and 2 bags of skittles and she spent $10.50. Claire spent $14.75 and bought 3 bags of sour patch kids and 7 bags of skittles. Based on this information, how much does a bag of sour patch kids cost & how much does a bag of skittles cost at Water & Ice?
Ms. Rodriguez gave a test that had 42 questions consisting of Multiple Choice and short answer questions. If the test is worth 60 points and Multiple Choice questions are worth 1 point and short answer questions are worth 3 points, how many Multiple Choice & Short Answer questions were on the test that Ms. Rodriguez gave?
Word Problems

Devon has been saving $5 & $10 for the past four years. Over spring break he wanted to see how much money he has saved up. After counting the money he calculated that he has a total of $395 & had 49 bills. Based on this information, how many $5 & $10 bills does he have?
Leah & Desiree went to the mall to go shopping. They bought a total of 28 shirts & shorts combined. If the amount of shorts they bought is equal to 8 less than three times the amount of shirts they bought, how many shirts & how many shorts did they buy at the mall?
Cameron & Brett are trying to sell upper & lower level tickets to two Diamondbacks game to raise money for their club baseball team. They sold 5 lower level & 9 upper level tickets to the first game for a total of $303. They sold 8 lower level & 10 upper level tickets to the second game for a total of $410. How much money did the people pay for lower level & upper level tickets to go to a Diamondbacks game?
• Alex bought 25 pounds of Apples & Pineapples from Trader Joes. Apples cost $2 a pound and pineapples cost $3.50 a pound. If for the 25 pounds of fruit Alex bought he had to pay $62, how many pounds of Apples & Pineapples did he buy?
Word Problems

• The amount of students who went to Mini-town at Altadena this year was 189 students. If the amount of girls that went doubled the amount of boys that went to Mini-Town, how many girls & boys went to Mini-Town?
Grace Marie & Kiersten each went to the movies last weekend with their families. When Grace Marie went they bought 2 adults & 3 children tickets and it cost her parents $43.00. When Kiersten went it cost her family $36.50 and they bought 3 adult tickets & 1 child ticket. If they both went to the same movie theater at the same time, how much does it cost for Adult tickets & Child tickets?
Word Problems

• Jake & James went on a flight from Phoenix to Dallas, which is about 900 miles. On the way to Dallas they were travelling with the wind & it took 3 hours. On the way back from Dallas to Phoenix they were travelling against the wind & it took them 3 hours & 36 minutes. Based on the information, what was the speed of the plane in still air & what was the speed of the wind?
Word Problems

• Paige has been training to get a rowing scholarship by doing a bunch of rowing at Tempe Town lake. The other day when Paige was out rowing she was travelling upstream & went 45 miles in 9 hours. When turned around and headed downstream she was able to row 42 miles in 2 hours. Based on this information, what is the speed of the boat in still water & what is the speed of the current?