**Math 10C Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Word Problems using Systems of Elimination. Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**For the following problems, write a Let statement, write a system of equations and solve by elimination.**

1. A study recorded the reactions of 186 polar bears as they were approached by a tundra buggy. Some bears did not appear to respond, while others responded by sitting, standing, walking away, or running away. There were 94 more bears that did not respond than did respond. How many bears responded and how many bears did not respond? [5]
2. Brad went to Wal-Mart, he found that two tapes and three CD’s cost $31.00. And three tapes and two CD’s cost $29.00. Find the cost of one tape and one CD. [5]
3. Louise purchased a Metis flag whose length was 90 cm longer than its width. The perimeter of the flag was 540 cm. What are the dimensions of the flag? [5]
4. Sam scored 80% on part A of a math test and 92% on part B of the math test. His total mark for the test was 63. The total mark possible for the test was 75. How many marks is each part worth? [5]
5. Melody surveyed the 76 grade 10 students in her school to find out who played games online. One-quarter of the girls and of the boys said they played online games with someone over the weekend. Thirty-nine students played online games that weekend. How many girls and how many boys did Melody survey? [5]
6. Five thousand dollars was invested in two savings bonds for one year. One bond earned interest at an annual rate of 2.5%. The other bond earned 3.75% per year. The total interest earned was $162.50. How much money was invested in each bond? [5]