> Answer the questions in the spaces provided on the question sheets. If you run out of room for an answer, continue on the back of the page.

Name: _____

1. Solve the following linear equation

$$2(x-1) + 3 = x - 3(x-1) \ .$$

> **Solution:**

2. Solve the following equation
$$\frac{x}{5} - \frac{1}{2} = \frac{x}{6} \ .$$

3. The length of an American football field is 200 feet more than its width. If the perimeter is 1040 feet, then how wide is the field?

4. You have 150 dollars to inverst. Part of the money is invested in an account through Yankton Financial paying 15% annual interest. The rest of the money is to be invested in a second account at Vermillian Bank paying 13% interest. If you would like 2$ a year in interest, how much should you invest into each account? Feel free to keep your answer unsimplified.

5. Perform the following computation using complex numbers.

$$(7 + 2i) - (5 - 7i) =$$

6. Perform the following computation using complex numbers.

$$(3 + 5i)(-5 - i) =$$