**Assignment No. 2**

**Topic: Ratio and Proportion**

Solve the Questions in the space provided.

1. $If \frac{3a+4b}{3c+4d}=\frac{3a-4b}{3c-4d}, Prove that \frac{2a^{2}+3c^{2}}{2b^{2}+3d^{2}}=\frac{2a^{2}-3c^{2}}{2b^{2}-3d^{2}}$ .
2. Mean Proportional between 9 and a number is 18. Find the number and third proportional to them.
3. What least number must be subtracted from each of the numbers 7,17 and 47 so that the

Remainders are in continued proportion.

1. Solve for $x: \frac{\sqrt{7x}+\sqrt{4x-3}}{\sqrt{7x}-\sqrt{4x-3}}=6.$
2. Using Properties of Proportion solve: $\frac{a+x+\sqrt{a^{2}-x^{2}}}{a+x-\sqrt{a^{2}-x^{2}}}=\frac{b}{x} .$