

Name: \_\_\_\_\_

Section: \_\_\_\_\_

## Dimensional Analysis – Applying Your Knowledge

Directions: Use your knowledge of dimensional analysis to answer the following questions. **You must show your work!**

You have just finished your training as a war strategist in the midst of the Civil War. Your job will be to assist the Union Army as it attempts to regain its leverage over the unrelenting Confederate push. Your commanding officer, General McClellan, has had a difficult time deploying a sufficient number of troops given the scarce amounts of information and his lack of knowledge regarding how to handle the information. The last two deployments have resulted in the Union soldiers retreating back to camp while also experiencing numerous casualties. Use the notes you took during your training to help provide your commanding officer with a more suitable deployment strategy and subsequently reduce his stress.

*January 17, 1862*

*Class Lecture*

*Army Organization Notes*

*The army and its troops are organized as follows:*

*1 Squad = 10 soldiers*

*1 Platoon = 20 (or more) Squads*

*1 Company = 100 soldiers*

*1 Regiment = 10 Companies*

*1 Brigade = 3-5 Regiments*

*1 Division = 2-5 Brigades*

*1 Army Corps = 2 or more Divisions*

*1 Full Army = 2 or more Army Corps*



General McClellan knows the following information and would like your input so he can determine how to proceed:

Task 1 – The Confederate army will deploy 2.5 Squads to investigate a potential stronghold. Approximately how many soldiers should your commanding officer deploy to equally match up?

Task 2 – General McClellan would like to take over a Confederate base camp that is currently occupied by 1.5 Regiments. Approximately how many Platoons should be deployed to equally match up?

Task 3 – You have been promoted to Brigadier General because all of the others are sick with dysentery and you are marching into the battle near Richmond. How many soldiers are you responsible for?

Dysentery - diarrhea

Task 4 – The Quartermaster needs to provide footwear to the 54<sup>th</sup> Massachusetts Regiment. How many shoes must he order?

Quartermaster – responsible for providing clothing, supplies, and uniforms (not weapons or ammo)