**Unit 4 Day 10 – Notes**

**Writing Equations – Application Time!**

Ex 6) You are an avid coin collector. You decide to start keeping better track of your coin collection: After 15 days you count and find out you have 155 coins. After 22 days you have a total of 218 coins.

A) Write an equation in POINT-SLOPE form that represents this situation (define your variables)



B) Convert your equation to Slope-Intercept form



D) How many coins did you start with?



C) What does your Slope represent?



E) After how many days would you have 425 coins?



Ex 7) A zoo keeper thinks there is a problem with the Naked Mole-Rat population at the zoo. He starts keeping track of the animals in the tunnels. 4 days into his monitoring he counts 134 mole rats, 14 days in he counts 119.

A) Write an equation in POINT-SLOPE form that represents this situation (define your variables)



B) Convert your equation to Slope-Intercept form



D) If nothing changes, how many days will go by before the mole-rats are gone?

C) What does your Slope represent?



E) How many Mole-Rats where there when he started monitoring?

