Population Simulation Assignment Answers

(Lynx and Hares)

Check your answers to the population simulation assignment with the Lynx and Hares (Rabbits). If you missed any questions, attempt the simulation/questions again. Try to get the correct answers, but do not worry if you are still incorrect, the goal is to work on graphing skills and understanding changing populations.

1. The lynx population is low (total-1 starved). Therefore, the lynx population stayed the same since the beginning. The hare population is growing. It takes time to have enough hares (food) for the lynxes.
2. The answers may vary slightly, but the hare population may be around 46-48. The lynx population will still be 1 starved lynx.
3. The answers will vary in the 8th generation. I had 8 Lynxes (alive) and 632 hares. However, I have done this simulation several times. Sometimes, I have as many as 23 lynxes. Main idea, the lynx population increases because there is more food (hares) available for the lynxes.
4. In the 9th generation, the hare population falls or declines. The lynx population continues to increase. The line graph shows the hares declining and the lynx population increasing.
5. The lynx population declines because there is less food (hares) available for them to eat.
6. The cycle repeats 2 more times and looks similar. A total of 3 similar cycles occur over 30 generations.