

Lab 9 Expectations

Submit plots: 2, 3, 5(a), 6, 7 (2 graphs), 9

1. Find the two points, showing all work.
2. Submit graph and a short sentence describing the graph.
3. Submit graph and a short sentence describing the graph.
4. Solve the differential equation, showing all work.
5. (a) Attach the graph and the two y-values.
(b) Find the y values corresponding to $x=2..10$. You may consider presenting this information in a table. Find the maximum x value which has one y value. Explain why there is only one value of y in a short sentence.
(c) Find the smallest x value for which there is a corresponding y value. Explain why there's only one value of y in a short sentence.
6. Attach a graph (or reference the graph from 5a) and write a short paragraph explaining why $C > 0$, why there are typically two y values, $\lim_{x \rightarrow \infty} F(x) = 0$, why if x is sufficiently large, then there are no values of y for which the above equation is true, and why if x is sufficiently near 0, there are no such y.
7. Need two graphs and a short sentence discussing the period.
8. Show all work to find the \bar{y} in the same manner as shown for \bar{x} .
9. Find \bar{x}, \bar{y} , attach a graph, and write a short discussion relating the average populations and the graph back to the original question of the lab. Make sure to answer the question "What effect does fishing have on each different fish population?"