

Go over quiz.

Consider the information in Lesson 4, pages 38-40, HW 1, Table 4.

1. Graph the Market Price and the Cost per fish on the same axes.
2. Estimate the intersection point.
3. Why is the intersection point called the equilibrium point? What does that mean?
4. Write the Market Price formula. (First write it with x and y , then translate to a formula with N and p .)
5. Write the Cost per Fish formula.
6. Find the equilibrium point algebraically.
7. Did the point you found algebraically consistent with the point you estimated from your graph?
8. For this process, how does the Market Price change when the Fish Population size increases by 1 million?
9. For this process, how does the Cost per Fish change when the Fish Population size increases by 1 million?
10. Use the words slope or intercept to describe the values in the each of the two previous questions.
11. Add a column to the table which is "Profit per Fish" and compute the values of Profit per Fish for the given N -values. Call this column "Profit per Fish, f ."
12. For what values of N is the fishery making a profit?
13. For what values of N is the fishery having a loss?
14. Write the Profit per Fish formula. (First write it with x and y , then translate it to a formula with N and f , where f means Profit per Fish.) For what values of N is the fishery making a profit?
15. What is the Profit per Fish when the Fish population is 28 million?

Quiz:

An artist paints a painting and then makes some excellent-quality prints of the painting. The information in the following table is the cost and revenue from making and selling these where x = number of prints made / sold.

x	Cost, C	Revenue, R	Profit, P
0	640	0	
10	840	450	
20	1040	900	
30	1240	1350	
40	1440	1800	

1. Graph the Cost Formula and the Revenue formula on the same axes.
2. Estimate the intersection point. Why is it called the "break-even" point?
3. Add a column to the table which is "Profit" and compute the values of Profit for the given x -values.
4. For what values of x is the artist making a profit?
5. For what values of x is the artist having a loss?
6. Write the Cost formula. (First write it with x and y , then translate it to a formula with x and C .)
7. Write the Revenue formula.
8. Find the "break-even" point algebraically.
9. Did the point you found algebraically consistent with the point you estimated from your graph?
10. Write the Profit formula.
11. How much is the artist's profit or loss when she makes/sells 37 prints?
12. For this process, what is the fixed cost of making the prints?
13. For this process, what is the cost of making each additional print?
14. For this process, what is the revenue from selling one print?
15. For this process, what is the profit from selling one print?
16. Use the words slope and intercept to describe the values in the previous four questions.
17. Interpret the intercept of the Profit formula.