

Parabolas for Profit – Seaside Scoops (Draft 2 of 4)

Student: Alex R.

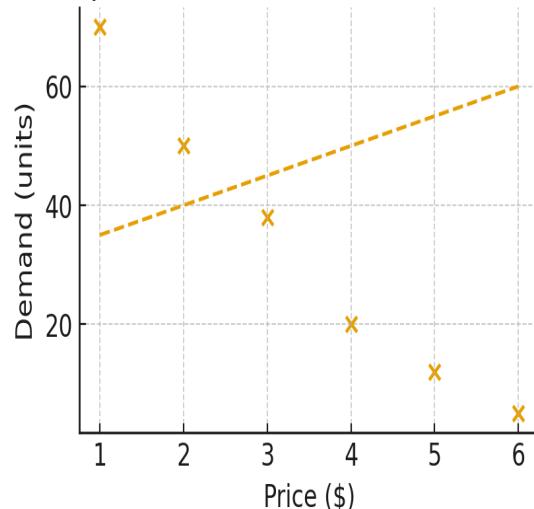
Overview: I added a formula for profit = (price - cost) × quantity - fixed cost. I used \$1 cost per ice cream and \$20 fixed cost for the day. I tried to draw a line for demand.

Survey Data Table:

Price (\$)	Demand (people)
1	70
2	50
3	38
4	20
5	12
6	5

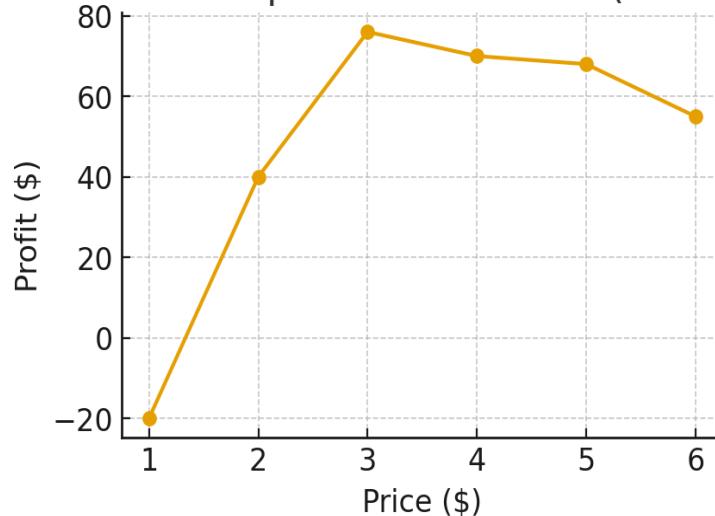
Demand vs. Price (Regression Line Added)

Seaside Scoops: Demand vs Price (Incorrect Regression)



Profit Graph

Seaside Scoops: Profit vs Price (Attempt 2)



Summary: My graph shows that profit goes up when price increases. The line for demand goes up too, so I think when prices go up, more people want to buy. That means the shop should charge \$6 or more to make the best profit.

Teacher Feedback:

- Student is using a positive slope for demand; it should decrease as price increases.
- The profit equation setup is right but applied incorrectly to data.
- Graph axes labeled but regression is wrong direction.
- No evidence of quadratic shape; profit graph should show a peak.
- Reasoning contradicts data: higher prices should reduce demand.