Problem 1

Estimate the demand function for the data below using a spreadsheet.

	A	B	C
1	**obs**	**P**	**Q**
2	1	100	1400
3	2	200	1200
4	3	300	600

(The process is identical in either Excel or Google Sheets. You could also use Stata.)

Problem 2

Consider the following spatial competition problem.

- There are two pizza places, each on the opposite end of a mile-long street evenly filled with consumers. Both pizza places are delivery-only.
- The pizza place on the far-left end of the street—Pizza Place A—sells a pizza that consumers think has a value of $v_A = 22$. Their marginal cost per pizza is $c_A = 1$.
- The pizza place on the far-right end of the street—Pizza Place B—sells a pizza that consumers think has a value of $v_B = 25$. Their marginal cost per pizza is $c_B = 2.5$.
- Each pizza place charges $a = 2$ per mile for delivery.

Complete the following:

(a) Find the equilibrium price for each pizza place.

(b) Find the equilibrium quantity sold for each pizza place.

(c) Find the equilibrium profit for each pizza place.