

I am making a healthy snack shop for my class, which will sell bananas. I need to decide the pricing of my bananas, taking into account the impact of price on the number of customers.

I am going to calculate the profit for different pricing scenarios. For making these calculations, I have assumed a cost price of twenty cents per banana. I have also assumed the number of customers per hour for different selling prices. As you can expect, this number decreases as the selling price increases.

Sale price per banana	20¢	22¢	25¢	35¢	50¢	75¢	90¢	1€
Customers/hr	25	15	10	7	5	2	1	0
Total sale price	500¢	330¢	250¢	245¢	250¢	150¢	90¢	0¢
Total cost price	500¢	300¢	200¢	140¢	100¢	40¢	20¢	0¢
Profit/hr	0¢	30¢	50¢	105¢	150¢	110¢	70¢	0¢

These calculations show that as the selling price increases, the profit increases until a certain point, before dropping. That said point indicates the optimum selling price, which yields the most profit.

For the values I have assumed, this optimum selling price is fifty cents per banana, giving a total profit of €1.50 per hour.