Write a profit function for each problem below. Also, define the variables.

1) Faldo's pizza makes $8/pizza and $1.50/slice of pizza.

2) Jaime John's makes $3/sandwich and $1/soda.

3) Doctor Flechbert makes $5000 for each liposuction and $4000 for each rhinoplasty.

4) Mommy Domati makes $10 for each spaghetti dinner and $8 for each parmesan sandwich.

For each word problem below: a) write a system of inequalities and a sales function. Do not graph the system.

5) Frida's Florists must sell at least 20 arrangements and at least 15 plants per week. Together, it cannot sell more than 100 items. It makes $30/arrangement and $10 per plant.

6) Emmanuel's Storage collects $20 for small spaces and $30 for large spaces. It must have at least 50 people renting small spaces and at least 20 people renting large spaces. It has a maximum of 200 spaces to rent.

7) Starball sells two types of coffee, French vanilla for $3 and a tri-latte mocha for $4. It must sell 35 French vanillas and 25 tri-latte mochas. It cannot sell more than 300 coffees per day.

8) Juan's boss said he had to sell no more than twice the number of cars as he did vans every month. He couldn't sell more than 15 cars per month. Juan made $500 per car and $800 per van.

9) Jacky has to sell no more than five loveseats and no more than ten couches a month. He has to sell at least eight pieces of furniture per month. Couches sell for $1200 and the smaller loveseats sell for $700.

10) Hilda runs a small helicopter business and runs long tours for $200 and short tours for $90. She has to give at least seven short tours, but no more than twelve short tours per month. She can give no more than seven long tours per month. Her total tours cannot exceed fifteen per month.

11) P-Dummy sells live CDs and studio CDs. He needs to sell at least 5000 live CDs, but no more than 20000. He needs to sell no more than 10000 studio CDs. P-Dummy sells his CDs at $5 for studio and $4 for live performances.

12) Tim Tinkoy's Toys makes two types of action figures. It sells Tigermen for $5 and Triceratopsmen for $8. It has to sell at least five Triceratopsmen, but no more than fifty. It has to sell at least ten Tigermen, but no more than one hundred. It can sell a maximum of one hundred twenty figures.