SYSTEM of INEQUALITIES WORD PROBLEMS

Greater Than >	Less Than <	Greater Than or Equal To ≥	Less Than or Equal To ≤

1. You can work at most 20 hours next week. You need to earn at least $75 to cover you weekly expenses. Your dog- walking job pays $8 per hour and your job as a car wash attendant pays $6 per hour. Write a system of linear inequalities to model the situation.

2. Huda is buying plants and soil for her garden. The soil cost $4 per bag, and the plants cost $10 each. She wants to buy a minimum of 5 plants and can spend no more than $100. Write a system of linear inequalities to model the situation.

3. Hassan is going to the store to buy candles. Small candles cost $4 and large candles cost $5.00. He needs to buy at least 20 candles, and he cannot spend more than $70. Write a system of linear inequalities that represent the situation.

4. John is packing books into boxes. Each box can hold either 16 small books or 8 large books. He needs to pack at least 20 boxes and at least 240 books. Write a system of linear inequalities to represent the situation.

5. During a family trip, you share the driving with your dad. At most, you are allowed to drive for three hours. While driving, your maximum speed is 55 miles per hour.

6. Jason is buying wings and hot dogs for a party. One package of wings costs $8. Hot dogs cost $5 per pound. He must spend less than $40. Jason knows he will be buying at least 4 pound of hot dogs. Write a system of inequalities to model the situation.