**You Try! Write an inequality to represent each scenario below.
You do not need to solve.**

1. Charter-A-Bus charges $50 plus $0.40 a mile for renting a charter bus. Buses-4-U charges $35 plus $0.55 a mile. For what number of miles is Buses-4-U the less expensive company for renting a charter bus? Write an inequality that represents this problem.

2. Ocean Adventures charges $35 an hour to rent a sailboard plus $14 for a wetsuit. Water Fun Inc. charges $22 an hour plus $40 for a wetsuit. Write an inequality to represent that the cost of renting a sailboard and wetsuit costs less at Ocean Adventures.

3. Tees 4 U charges $16.50 for each T-shirt and offers a $2 discount off the total number of T-shirts purchased. T-Time charges $18 for each T-shirt and offers a $5 discount. How many T-shirts must you buy at Tees 4 U for the total cost to be less expensive than the total cost at T-Time?

4. Jacob bought a book that cost $11.95 and magazines that cost $4.95 each. Isabella bought a book that cost $15.79 and magazines that cost $3.99 each. Jacob spent the same amount or less money than Isabella. Write an inequality to represent this real-world problem. (Example 1)

5. In Brownsville, Texas, it is 88 degrees Fahrenheit. The temperature is expected to drop 1.5 degrees each hour. In Mesquite, Texas, it is 94 degrees Fahrenheit, and the temperature is expected to drop 2 degrees each hour. In how many hours will the temperature in Mesquite be greater than the temperature in Brownsville?

6. Music Incorporate charges a membership fee of $9.99 plus $0.99 for each song downloaded. Your Choice Music does not charge a membership fee but charges $1.99 per song downloaded. Determine the number of songs for which Music Incorporated costs the same or more than Choice Music.

7. It takes Lucy 20 minutes to bike to the pool and $3\frac{1}{2}$ minutes per lap to swim in the pool. It takes Dan 30 minutes to jog to the pool and $2\frac{3}{4}$ minutes per lap to swim in the pool. How many laps must Lucy swim in order for her to spend the same number of minutes as Dan?

8. Trash Management charges its customers a fee of $25 plus $8 for each trash can they need emptied. Waste Away charges its customers $12 per trash can with no fee. **Write an inequality that can be used to determine the number of** trash cans for which it is less expensive for a customer to use Waste Away as their trash service.

9. . Mountain climber A is at an altitude of 250 feet and is descending at a rate of 30 feet per hour. Mountain climber B is at an altitude of 400 feet and is descending at a rate of 50 feet per hour. In how many hours will the altitude of mountain climber B be lower than the altitude of mountain climber A?

10. Valeria does not charge an initial fee for babysitting but charges $10 an hour. Daniel charges $8 per hour plus an initial fee of $10. How many hours does Valeria need to babysit in order to make the same or more money than Daniel?