Dear Investigator __________________,

I want to take my family on four different bike trips during the summer. We'll need to rent the bikes for the trips. The company where I will rent the bikes has two different plans. I would like to know which plan I should use for each trip to spend the least amount of money.

It would really make it easy for me if I had an expression for each plan where I could just put the number of hours of a bike trip in the expression and then evaluate it. I have heard you're good with expressions. I would like you to write an expression for each plan for me. I would also like you to use the expressions for each of my planned trips and let me know which plan I should choose for each trip.

I am curious about one more thing. Is there a number of hours for a bike trip where it does not matter which plan I choose?

Sincerely,
Susan Chung

Information

Bill's Bike Company
   Plan A: $50 flat rate plus $2 an hour
   Plan B: $12 an hour

Susan Chung's Bike Trips
   Trip L: 2 hours
   Trip M: 4 hours
   Trip N: 6 hours
   Trip O: 8 hours
Dear Ms. Chung,

Here are the expressions for each plan.

Plan A: _______________________________________________________

Plan B: _______________________________________________________

Here is how I used the expressions for each trip and my recommendation for which plan to use.

Trip L:

Trip M:

Trip N:

Trip O:

If you take a bike trip of _________ hours it doesn’t matter which plan you choose.

Have a good time on your bike trips.

Yours truly,

Investigator ________________________

(your name)