If you received this application it means you may be selected to appear on “Illest Road Trip of All-Time.” IRT is a new show where groups of people get $10,000 for a road trip that will be a “unique, life-changing, and eminently watchable experience”. The money you spend will mainly go towards two things: your vehicle (rental and gas), and your daily expenses (Hotel and Food). Plan carefully, groups who do not plan to spend at least $9,500 of the money will not be considered.

The possibilities for your trip are limited only by your ability to budget the money. MTV can drive it’s production vans anywhere in the United States and has relationships with gas stations, hotels, and restaurants to provide you with what you need to finish your journey. You can take as many days of your wish as long as you start and finish in Clearbrook, Minnesota. You could take a trip as short as 1 week or as long as 31 Days. You can use the money on a solo drive from the beaches of Florida to the Mountains of Alaska and stop by California on your way back. The trip cannot go across the Atlantic Ocean to Europe, or across any other body of water, because a “Road Trip” needs to take place on an actual road, not a boat. You can also use your money to take up to 7 of your friends with you on this unforgettable road trip!

MTV wants to support an impressive and detailed trip, and one of the most important things to show, is that you can manage the money well. That means you need your trip to fall between $9,500 and $10,000. As long as the ideas are well thought out, MTV will consider any proposal.

Application Abstract

Who will attend the trip? Bring up to 7 other people. On the lines below write the names of your friends, family, and even famous celebrities (MTV can pull strings):

1. ____________________________ 2. ____________________________
   Your Name
3. ____________________________ 4. ____________________________
5. ____________________________ 6. ____________________________
7. ____________________________ 8. ____________________________
Part I. Expenses

Expenses - Your main expenses for this trip, outside of the car, will be food and lodging, which are calculated separately. MTV will provide you with three different types of Food and Lodging.

<table>
<thead>
<tr>
<th>Food</th>
<th>Lodging</th>
<th>Baggage</th>
</tr>
</thead>
<tbody>
<tr>
<td>★★★★★ $200/day per person</td>
<td>Luxury Suites $500/day - up to 8 people in each Luxury Suite</td>
<td>Designer Brand Luggage $300 for each person</td>
</tr>
<tr>
<td>High Quality Cuisine</td>
<td>Hotel Rooms $100/day - up to 4 people in each Hotel Room</td>
<td>High Quality Duffel Bags $75 for each person</td>
</tr>
<tr>
<td>in Fancy Restaurants</td>
<td>Campground $25 /day - up to 4 people at each campground</td>
<td>Plastic Bags / No Luggage $0 for each person</td>
</tr>
<tr>
<td>★★★ $100/day per person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy nutritious meals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in family-style diners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>★ $25/day per person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dollar Menu items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in fast-food joints</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Using this information what type of food and lodging would you like to choose and why?
______________________________________________________________________________
______________________________________________________________________________

Given the number of people that are going on the trip, what is the total amount you will you spend on food and lodging each day?

_______________________

Total Food & Lodging Per Day

Given the number of people that are going on the trip, what is the total amount you will you spent on luggage for everybody?

_______________________

Total Baggage Expense

Now use the amount you spend on Daily expenses to make an equation in slope-intercept form that will give you the expenses (y) for any given amount of days (x).

Total Expense equation: ___________________________
Application for the ILLEST ROAD TRIP OF ALL TIME

Part II. Route

Create a Map for your trip using Bing Maps

(http://www.bing.com/maps).

1. Go the website
2. Click ‘Get Directions’
3. Enter your starting address in Clearbrook, MN
4. Enter your destination(s)
5. Click ‘Add to route’ before writing in your next destination you want to include more places
6. If you have more destinations, enter each and click ‘Add To route’ each time.
7. When finished, click ‘Add To Route’ one final time and enter your ending address in Clearbrook
8. Click ‘Get Directions’
9. Look over your route, if you want to change it, Click ‘Edit Route’ in the top left
10. Once your route is good, write down the information about your route below

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

Miles

________________________________________________________________________________________
________________________________________________________________________________________

Hours

If MTV only allows people to drive at maximum 10 Hours each day. What is the smallest number of days you could spend driving?

If your trip ends up being 31 days, and you spread the driving out over each day, how many hours would you spend driving each day?
Part III. Vehicle Expenses

MTV will allow you the free use of the following vehicles for your trip because they have product placement deals. Make sure you have enough room for all of your passengers. Pay attention to the Miles Per Gallon (MPG), you will have to pay for gas as well.

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Cost/Day</th>
<th>Passengers</th>
<th>City/Highway MPG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suzuki TU250x</td>
<td>$22/Day</td>
<td>2 Passengers</td>
<td>70/82</td>
</tr>
<tr>
<td>Honda Prius</td>
<td>$34/Day</td>
<td>4 Passengers</td>
<td>51/48</td>
</tr>
<tr>
<td>Audi A4 Cabriolet</td>
<td>$67/Day</td>
<td>4 Passengers</td>
<td>21/29</td>
</tr>
<tr>
<td>Cadillac Escalade Hybrid</td>
<td>$98/Day</td>
<td>8 Passengers</td>
<td>21/22</td>
</tr>
<tr>
<td>Lamborghini Murcielago*</td>
<td>$160/Day</td>
<td>2 Passengers</td>
<td>8/13</td>
</tr>
</tbody>
</table>

What type of vehicle did you choose and why?
______________________________________________________________________________

Once you choose a vehicle, use the Highway MPG to find out how many gallons it will take you to finish your trip.

Gallons of Gas Needed

MTV will have gas available throughout the trip at their corporate rate of $2.40/gallon. How much will your total cost on gas be?

Cost of Gallons of Gas Needed

Now use the amount you spend on the Vehicle Rental and on Gas to make an equation in slope-intercept form that will give you the expenses (y) for any given amount of days (x).

Total Vehicle Equation ________________________________
Part IV. Calculating Costs

Use the equations to calculate the cost of a 1, 2, 3, or 4 week trip. Write your results in the table, show your work for at least one example below.

<table>
<thead>
<tr>
<th>Days</th>
<th>Vehicle Cost - (Check Part IV)</th>
<th>Food and Lodging Cost - (Check Part I)</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>$Y=____________________________</td>
<td>$Y=______________________________</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Show your work below (if you cannot fit work into the above boxes).

If you can’t find a suitable trip in the table above, then you should be able to use the tables below to determine what the longest possible trip could be. REMEMBER THE TRIP MUST BE BETWEEN $9,500 AND $10,000. Try different lengths of trips in the spaces below.

<table>
<thead>
<tr>
<th>Days</th>
<th>Vehicle Cost - (Check Part IV)</th>
<th>Food and Lodging Cost - (Check Part I)</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It might be that no length trip would work, if that is the case adjust your equations by choosing different values for hotels, cars, food, etc. Then, go through and total up all these equations again. Additionally, if you had to change any of your equations explain your changes below.

______________________________________________________________________________

______________________________________________________________________________
Graph two equations or the total two equations below. Include labels on the x and y axis, a title, a key, and very neat graph.
Part V. Sponsorship

MTV regularly has offers from companies for “Product Placement” in their reality shows. Companies will pay MTV, and you, to if their products appear in the show. Coca Cola, Pepsi and Snapple have both agreed to pay participants if their products appear on the show, but participants must choose only one deal the amount depends on the length of your trip.

Use the information to find an equation (y=mx+b) for the amount of Sponsorship Money (y) you can make for each day of the trip. Show your work and explain your steps below.

<table>
<thead>
<tr>
<th>Coca Cola</th>
<th>Pepsi</th>
<th>Snapple</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Days</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Days</td>
<td>$164</td>
<td></td>
</tr>
<tr>
<td>15 Days</td>
<td>$194</td>
<td></td>
</tr>
<tr>
<td>20 Days</td>
<td>$224</td>
<td></td>
</tr>
<tr>
<td>10 Days</td>
<td>$160</td>
<td></td>
</tr>
<tr>
<td>20 Days</td>
<td>$260</td>
<td></td>
</tr>
<tr>
<td>9 Days</td>
<td>-$30</td>
<td></td>
</tr>
<tr>
<td>19 Days</td>
<td>$190</td>
<td></td>
</tr>
</tbody>
</table>

Coca Cola: ________________  Pepsi: ________________  Snapple: ________________

Demonstrate how you know the equations work by checking your answer

Explain in words how you found the equation for Coca cola and Pepsi

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
Part VI. Comparing Plans

Use your equations from Part III to find out how much you’ll make with each plan for 1, 2, 3, and 4 weeks.

<table>
<thead>
<tr>
<th>Days</th>
<th>Coca Cola</th>
<th>Pepsi</th>
<th>Snapple</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 days</td>
<td>Y = ______</td>
<td>Y = ______</td>
<td>Y = ______</td>
</tr>
<tr>
<td>14 days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 days</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On what day would Pepsi and Coca Cola pay the same amount?
Solve the system of equations and show your work.

On what day would Coca Cola and Snapple pay the same amount?
Solve the system of equations and show your work.

On what day would Pepsi and Snapple pay the same amount?
Solve the system of equations and show your work.
Application for the ILLEST ROAD TRIP OF ALL TIME

©

Name ________________________________ Hour ___

Use the chart below to graph all three equations for Pepsi, Snapple and Coca Cola.
Where on the graph does it show the best company to choose?
Application for the ILLEST ROAD TRIP OF ALL TIME©

MTV has decided that a simple application will not be enough to help to decide which team to select to star in Illest Road Trip of All Time, so in order to convince MTV that you have the greatest road trip planned you will need to create a presentation for MTV to you should be on the show!

For your presentation:

1. Use Google Slides, Powerpoint, or Prezi to create an exciting, informational presentation to the producers at MTV.
2. Once you have set up your presentation you must include the following:
   a. Introduction, who is going on your trip?
   b. Part I: Expenses
      i. What type of food will you be selecting, why?
      ii. What type of lodging will you be selecting, why?
      iii. What kind of baggage will you bring with, why?
      iv. How much will you spend on food and lodging each day for everyone on your trip?
      v. What will you spend on luggage for everyone on the trip?
      vi. What is your expense equation?
   c. Part II: Route
      i. What is your route? Include an image of the route from Bing Maps.
      ii. What is your total mileage for the trip?
      iii. What is the total time spent driving?
   d. Part III: Vehicle Expenses
      i. Which type of vehicle did you choose? (Include a picture).
      ii. What is your gas mileage you will get with that vehicle?
      iii. How many gallons of gas will your trip require?
      iv. How much will gas cost you?
      v. What is your total vehicle equation?
   e. Part IV: Calculating Costs
      i. Input table 1
      ii. Input table 2
      iii. How many days will you be able to be on your trip for?
   f. Part V: Sponsorship:
      i. Coca-Cola Formula
      ii. Pepsi Formula
      iii. Snapple Formula
      iv. How did you find the equation for Coca-Cola, Pepsi, and Snapple?
   g. Part VI: Comparing Plans
Application for the ILLEST ROAD TRIP OF ALL TIME©

Name ________________________________ Hour ___

i. Input table 1
ii. What day will Pepsi and Coca-Cola be the same amount?
iii. What day will Coca-Cola and Snapple be the same amount?
iv. What day will Pepsi and Snapple be the same amount?
v. What company will you choose? Why?