

My Dream Car Project

Your birthday has arrived, and your parents are going to help you buy a car for about \$35,000, but you have to present an argument for the best car to purchase. They are wondering whether they should buy you a used or a new car. You will have to keep the car for 6 years.

You have to gather the information on 10 cars (5 new and 5 used) and present it to them to help make the decision as to the best car to buy. You will have to keep your car for 6 years.

- Your first job is to go online and find 10 cars that you think you would like to buy. You are working with a \$35,000 budget so you must not go over this amount. Copy & Paste a picture of each car and paste on your spreadsheet.

For each car that you find prepare a spreadsheet in Excel that contains:

- Make (For Example, Ford, Chevy, etc.)
- Model (Escape, Civic, etc.)
- Cost (DO NOT GO OVER \$35,000)
- New or Used
- If Used, how many miles
- Gas Mileage (This is how many miles the car gets per gallon. Use City Mileage.)
- Color

DREAM CARS														
Car	Make	Model	Cost	New/ Used	Millage	MPG	Color							
														
														
														
														

- Now please choose your 5 favorite cars and highlight them using the fill bucket.
- On a new sheet in your workbook, you will now do a 5-year analysis of each of the 5 cars under consideration.
 - Please name your new sheet **Cost Analysis**
 - Here is an example of the table you will need for each of the 5 cars. (**HINT:** Consider making one table, with borders and copy/paste 4 more to save time.)

Name of Car 1 (Ex: Red Toyota)						
Cost of Car						
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Gasoline Cost						
Insurance						
Transmission Fluid						
Brakes						
Tires						
Car Payment						
Total						

Now it's time to use formulas to fill in the information to decide which car to buy.

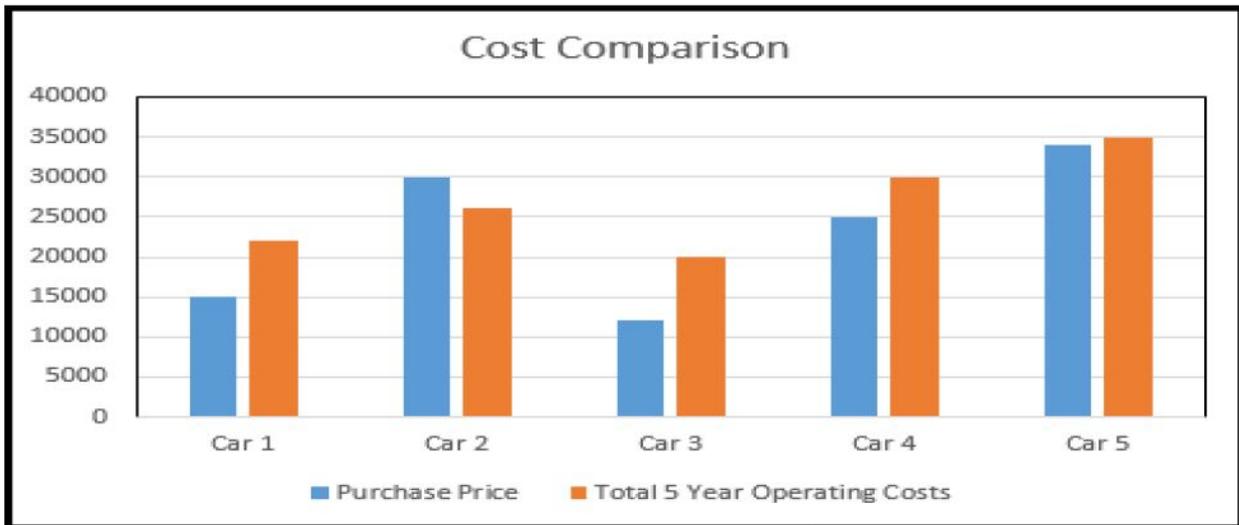
1. Gasoline Costs - We will assume you will use your car 12,000 miles each year. We will also assume gas is now \$2.00/gallon. You will need to look at Sheet1 to find out the miles per gallon or gas efficiency of the car. (**HINT:** Multiply the miles each year by the price per gallon and divide by the miles per gallon.)
2. Insurance Costs - Insurance is based on the price of your car, if you are a guy or a gal, and if you have a sports car. (**HINT:** Cost of the car divided by 1,000 times your cost)
 - a. Women: \$30 per \$1,000 car value
 - b. Men - \$40 per \$1,000 car value
 - c. Sports car - double the calculation above
3. Transmission Fluid - You will need to change the transmission fluid every 30,000 miles, and it costs \$120. (**HINT:** For a new car, that will occur in year 3. For a used car, you will need to evaluate the miles on the car when you bought it.)
4. Brakes - You will need a new set of brakes when the car reaches 35,000 miles, costing you \$400.
5. Tires - You will need new tires at 40,000 miles, costing you \$500
6. Car Payment - Your parents are going to give you \$15,000 cash. You will make payments on the difference between the cost of the car and \$15,000. Please calculate the payments at 60 months (5 years). The interest is now 2% for all cars.
 - a. Take the cost of the car and subtract the \$15,000 cash down payment
 - b. Click the function button and choose PMT
 - i. Rate: Interest rate/12 months (*Interest rates are annual*)
 - ii. Nper: Number of payments
 - iii. PV: How much is your loan (*you need to make this negative, trust me*)
 - c. Multiply the payments by 12 to calculate the yearly expense.
7. Total the last column and bottom row of each table.

Chart the Results

- Add a new sheet and name it CHARTS. You will begin by preparing the following table.

Comparison of Purchase Price and Operating Cost of the Top Five Cars		
Car	Purchase Price	Total Operating Costs

- In the first column, you will list the name of your car.
- In the second column, you will list the purchase price of the car (from Sheet1)
- In the third column, you will list the total five-year operating cost for each car (from the Cost Analysis sheet)
- You will create a column chart that compares the cars with their purchase price and total operating costs. It should look something like the chart below.



Create a new sheet named My Car.

- Put a picture of the car you would choose for yourself after analysing all your options.
- Insert a textbox and explain why you choose this car.
 - Be sure to write in complete sentences with proper capitalization and punctuation
 - You need at least 5 complete sentences to explain why you choose this specific car instead of the others you looked into.

Extra Credit:

1. **Advanced Chart Display:** Take one of your charts and figure out how to change the bars in that chart to make the bar out of stacked cars rather than the solid bars you had before.

My Car Selections

Car	Make	Model	Cost	New/ Used	Used Miles	Gas Mileage	Color
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Grading

Criteria	Worth	Earned
Workbook includes 4 sheets named appropriately	5	
Sheet 1 Includes: <ul style="list-style-type: none"> • 10 cars with all columns filled out • 10 images of the cars you choose • Appropriate font, alignment, merging, etc • Highlight top 5 choices 	5 5 2 2	
Cost Analysis Sheet includes: <ul style="list-style-type: none"> • 5 Tables (one for each car) formatted appropriately • Appropriate formulas using cell references, when able, to calculate gas costs, insurance, and car payment • SUM function to calculate totals 	5 12 5	
Charts Sheet includes: <ul style="list-style-type: none"> • Summary chart with cell references • Column chart comparing the 5 cars • Chart includes appropriate titles and labels 	5 5 5	
My Car Sheet includes: <ul style="list-style-type: none"> • Picture of final car • Textbox with summary • At least 5 complete sentences • Proper use of grammar, spelling, punctuation, etc. 	2 2 10 10	
TOAL	80	