Name of the NEW CAR I'd purchase (assume you have enough money to get it.)

_____

Price of the NEW CAR you decided to purchase in in the first question.

_____

PART ONE

Assume the car loses 63 % of it's value over the first five years….

a. Find out how much the car would be worth five years from the purchase.

b. Find the AVERAGE ANNUAL DECREASE of the car.

c. Write the formula for the value of your car with annual depreciation compounded annually.

d . If you purchased the car TODAY, find the cost of the car……

   • ONE YEAR FROM TODAY

   • TWO YEARS FROM TODAY

   • THREE YEARS FROM TODAY

   • FOUR YEARS FROM TODAY

e. In the first FIVE years, how much money did you lose?

PART TWO

Suppose you can purchase a USED version of the car for the price after 5 years. The used car would have the same annual depreciation as mentioned in PART ONE.

a . If you purchased the USED car TODAY, find the cost of the car……

- ONE YEAR FROM TODAY

- TWO YEARS FROM TODAY

- THREE YEARS FROM TODAY

- FOUR YEARS FROM TODAY

e. In the first FIVE years of owning the USED car, how much money did you lose?

PART THREE

On the graph below, graph the value of the NEW CAR over the first TEN YEARS

Value in Dollars

Years