Hybrid or Not?

Recent lower prices at the pump have stimulated sales of SUVs while slowing sales of smaller higher mileage cars. There are several good reasons for choosing a specific vehicle. Certainly the sticker price and the cost of operation are two important factors.

Consider two new vehicles. Car A can be purchased for $20,200 and gets an estimated 32 miles per gallon (MPG). Car B sells for $24,400 and gets an estimated 50 MPG.

At the recent price of $2.17 per gallon how many miles must the higher mileage car be driven to recover the $4,200 difference in the price between the two vehicles?

a) 45,854 miles  
b) 75,987 miles  
c) 123,543 miles  
d) 172,043 miles

Answer: d) at $2.17 per gallon Car B must be driven 172,043 miles to recover the $4,200 price difference between the two vehicles.

The two critical factors in this example are the cost differential between the two vehicles and the cost of gasoline. As the difference between the cost of the vehicles shrinks so does the breakeven point. For example, if the price premium for the higher mileage car is $2,000 and gasoline sells at $2.17 per gallon, the breakeven point falls to 81,925 miles. At $3.50 per gallon and a $2,000 price difference, breakeven occurs at 50,794 miles.

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