

Honda Gas-Hybrid Example 1 (Breakeven Analysis)



Shelby is trying to decide between buying a gas-powered Honda Civic LX (\$19,550 and 31 mpg) or a hybrid Honda Insight LX (\$22,830 and 55 mpg). According to Kelly Blue Book, the annual cost of maintenance and repairs is nearly identical and, after five years of ownership, both vehicles will have a salvage value of approximately \$9000 (so it can be ignored).

If gas costs \$2.50 per gallon, how many miles per year must Shelby drive to justify the added cost of the hybrid? Assume she can earn 4% per year on her investments, so we'll use that as her personal MARR.