

# BMW Refueling Calculations & Data Collection

1. Use the OBC Correction Factor (%) (from the fuel logbook) to adjust On-Board Computer's MPG value.

Example: If the correction factor is positive, add the percentage to the OBC MPG (e.g. for correction factor of 1.5%, multiply by 1.015%). If the correction factor is negative, subtract the percentage (e.g. for a correction factor of -1.5%, multiply by 0.985).

2. Divide the trip odometer reading by the corrected On Board Computer's MPG (e.g.  $400/25 = 16$ ) to estimate the amount of fuel needed at the fill-up.
3. Carry a pen and Post-It pad with you to the gas pump, in case the gas pump's printer is not working. Pump two thirds of the estimated fuel needed from the 93 AKI (premium) nozzle, with the pump at low speed (first click on nozzle handle). Print, but do not remove the receipt.
4. Pump the remainder of the fuel needed from the 87 AKI (regular) nozzle. (Do this quickly after pumping in the 93 AKI, so that the credit card will work a second time, before being blocked by the anti-fraud algorithms used by credit card companies.) Print and remove the combined receipts.
5. Reset the trip odometer (small button in the lower left corner of the instrument cluster). It is not necessary to record this value on the gas receipt or Post-It.
6. Record the mileage from the odometer (not the trip odometer), and the On Board Computer's (not the Trip Computer's) MPG and average speed on the gas receipt or Post-It.
7. Reset the On Board Computer values (not the trip computer).