

you
 Buy a car for
 \$12,500 at 9% per year
 compounded monthly.
 What is your monthly
 payment over 4 years
 effective monthly rate = $9/12 = 0.75\%$
 $A = 12,500 (A/P, 0.75\%, 48)$
 $= 12,500 * \left(\frac{0.0075 (1.0075)^{48}}{1.0075^{48} - 1} \right)$
 $= \$311.06 / \text{month}$

In Lebanon (pre-crisis), car loan payments are calculated differently using an "installment payment" method. For the loan here, the monthly payment would be $A' = (12,500 * 1.0075^{48}) / 48 = \372.76 .

So, the payment is higher. The reason is that installment payment charges interest on the whole loan balance every month. Recall that the running amortization in A/P charges interest on the remaining loan balance every month.