

18. Solution: B

Convert 9% convertible quarterly to an effective rate per month, the payment period. That is, solve for  $j$  such

that  $(1 + j)^3 = (1 + \frac{.09}{4})$  or  $j = .00744$  or .744%

Then

$$2(Ia)_{\overline{60}|0.00744} = 2 \left[ \frac{\ddot{a}_{\overline{60}|0.00744} - 60v^{60}}{.00744} \right] = 2729.7$$

Alternatively, use result listed in solution to question 7 above with  $P = Q = 2$ ,  $i = 0.00744$  and  $n = 60$ .

Then  $(P + Q/i) = (2 + 2/.00744) = 270.8172043$  and  $-n Q/i = -16129.03226$

Using BA II Plus calculator: select 2<sup>nd</sup> FV, enter 60 select N, enter .744 select I/Y, enter 270.8172043 select PMT, enter -16129.03226 select FV, CPT PV +/- yields 2729.68