**Solution 1.61**

A company that utilizes carbon fiber 3-D printing wants to have money available 2 years from now to add new equipment. The company currently has $650,000 in a capital account and it plans to deposit $200,000 now and another $200,000 one year from now. The total amount available in 2 years, provided it returns a compounded rate of 15% per year, is closest to:

(*a*) $1,354,100
(*b*) $1,324,100
(*c*) $1,125,125
(*d* ) $1,050,000

*Solution:*

Amount available = total principal in year 0 + interest for 2 years + principal added year 1
$$+ \text{ interest for 1 year}$$
$$= 850{,}000(1+0.15)^2 + 200{,}000\,(1+0.15)$$
$$= 1{,}124{,}125 + 230{,}000$$
$$= \$1{,}354{,}125$$

Answer is (a)