

1. Which of the following are true regarding the earned rate of a fund?

- a) the earned rate of a fund is the same as the lent rate that is charged by the lender
- b) the rates each part of the fund actually receives (or loses) determines the average earned rate of the fund (weighted average)
- c) to find the average earned rate of a fund, we can use the beginning and ending values of the fund and calculate the rate in Excel
- d) both b) and c)

2. Was the lump sum formula appropriate to use in the case of the Benjamin Franklin fund, when money was going in and out of the account?

- a) no—whoops, we should have used a different formula as it is not a lump sum.
- b) yes—there is no new principal money added in during a given 100 year period, only the lump principal. In between, any money coming in is only as the loan (a part of the lump sum) and it's interest (“that which is between”).
- c) other

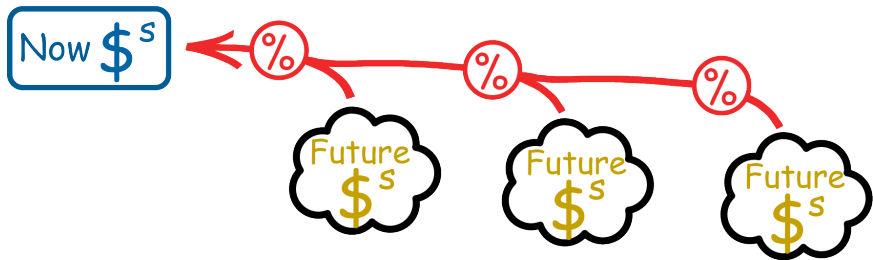


<https://www.fi.edu/benjamin-franklin-faq>

3. If we put in \$100 now and leave it there for 25 years compounded monthly at 5%, then how much interest, in dollars, will we have earned?

- a) \$110.95
- b) \$248.12
- c) \$348.12
- d) \$29550.97
- e) none of the above

4. How much should we put in now as a lump sum if we want the future value (FV) to be \$500 after 14 years of an account paying 1% compounded annually (i.e. what is the present value (PV) of the account)?



<https://www.mathsisfun.com/money/net-present-value.html>