Solution 1.25

To attract new customers, EP Employees Credit Union advertised that they will begin paying 3% interest every quarter on all savings accounts. (Their competitors pay interest every 6 months.) The credit union uses March 31st, June 30th, September 30th, and December 31st as quarterly interest periods. Determine (*a*) the end-of period totals in the account, and (*b*) the interest paid each quarter on the total. Assume there are no withdrawals and that quarterly interest is not redeposited.

Month	Deposit, $
Jan	50
Feb	70
Mar	0
Apr	120
May	20
June	0
July	150
Aug	90
Sept	0
Oct	40
Nov	110
Dec	0

Solution:

End-of-period amount for March: $50 + 70 = \$120$; Interest $= 120*0.03 = \$3.60$

End-of-period amount for June: $120 + 120 + 20 = \$260$; Interest $= 260*0.03 = \$7.80$

End-of-period amount for September: $260 + 150 + 90 = \$500$; Interest $= \$15.00$

End-of-period amount for Dec: $500 + 40 + 110 = \$650$; Interest $= \$19.50$