Chapter 7 / **Example 7**

Using the finance app

1 Rafael invests BRL 5 000 (Brazilian real) in a bank offering 2.5% interest compounded annually.

a Calculate the amount of money he has after five years.

After the five years, Rafael withdraws all his money and puts it in another bank that offers 2.5% interest per annum compounded monthly.

b Calculate the amount of money that he has in the bank after three more years.

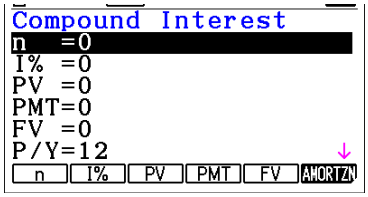
2 Alexis invests RUB 80 000 (Russian rouble) in a bank that offers interest at 3% per annum compounded quarterly.

a Calculate how much money Alexis has in the bank after six years.

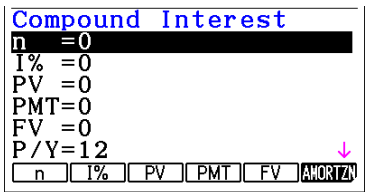
b Calculate how long it takes for his original amount of money to double.

Press MENU C TVM Financial.

Press F2 Compound Interest.

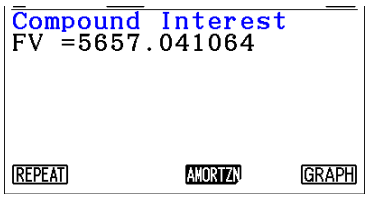


n = 5.
I% = 2.5.
PV = −5000.
PMT = 0.
FV = 0.
P/Y = 1.
C/Y = 1.

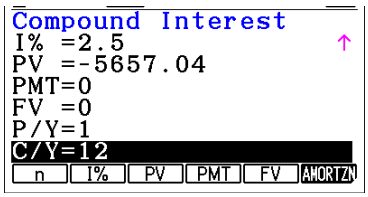


Press F5 FV to get the answer.

FV = BRL 5 657.04.

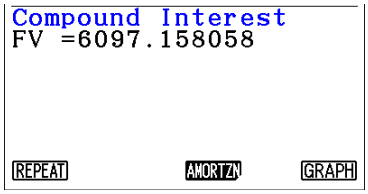
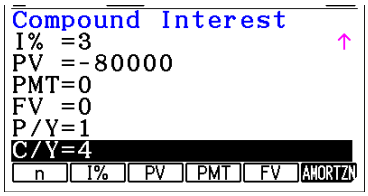
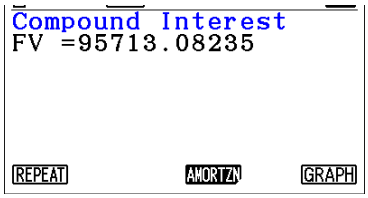
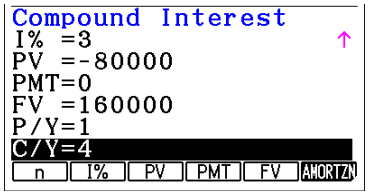


Press F1 REPEAT.
n = 3.
I% = 2.5.
PV = −5657.04.
PMT = 0.
FV = 0.
P/Y = 1.
C/Y = 12.



Chapter 7 / **Example 7**

Using the finance app

Press F5 FV to get the answer. FV = BRL 6 097.16.	
Press F1 REPEAT. n = 6. I% = 3. PV = −80 000. PMT = 0. FV = 0. P/Y = 1. C/Y = 4.	
Press F5 FV to get the answer. FV = RUB 95 713.08.	
Press F1 REPEAT. n = 0. I% = 3. PV = −80 000. PMT = 0. FV = 160 000. P/Y = 1. C/Y = 4.	
Press F1 n to get the answer. *n* = 23.19. So it would take 23 years for his money to double.