Congratulations! You passed!

Grade received 100% To pass 80% or higher

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1. Which function could I use to calculate the value of an account at the end of year 5 where I deposit $100 at the beginning of year 1, and the account earns 10% p.a. interest paid at the end of each year?

1 / 1 point

- ○ The **PMT** function.
- ○ The **PV** function.
- ○ None of these.
- ◉ The **FV** function.

Correct
Yes, this is correct. In this example, since there are no periodic payments after the initial deposit of $100, we would set the 3rd *pmt* argument as 0, and the 4th optional *pv* argument as -100. Our formula could then be **=FV(10%,5,0,-100)**.

2. I have a bank account worth $100 at the start of year 1. At the end of every 3 months I want to deposit an amount $X, so that at the end of year 2 the account is worth $200. The account earns 10% interest per year, and the interest is paid every 3 months on the same day I make my deposits. Which formula can I use to calculate the periodic deposit amount X?

1 / 1 point

- ◉ =PMT(10%/4,2*4,100,-200)
- ○ =PMT(10%/4,2,100,-200)
- ○ =PMT(10%,2,100,-200)
- ○ =PMT(10%,2*4,100,-200)

Correct
Yes, this is correct. Remember that both the first **rate** argument and the second **nper** argument of the **PMT** function must be expressed in terms of how frequently the cash flows occur. In this example, that is every 3 months, not every year.

3. The formula **=FV(5%,1,20,100)** gives a value of -125. This means that if I start with receiving a payment of $100, receive 5% interest ($5) for 1 period, and receive a payment of $20 at the end of 1 period, I would then need to give back $125 after year 1 to have balanced total payments of zero.

If I want my **FV** function to return +125 instead of -125, which of these adjusted formulas will give me that answer?

1 / 1 point

- ○ =FV(5%,1,-20,100)
- ○ =FV(-5%,1,20,100)
- ◉ =FV(5%,1,-20,-100)
- ○ =FV(5%,1,20,-100)

Correct
Yes, this is correct. When considering amounts for **PV**, **FV**, and **PMT** (either as results of those functions or as argument terms within those functions), it can be helpful to think of positive numbers as amounts that flow to you and negative numbers as amounts that flow away from you.