

“We are not a speculator but investor”

Eco352 Finance
10/23-25/2018 in-class activity

Name _____

1. Ordinary annuity

Suppose Alice decides to deposit \$400 each year for three years in a saving account that pays 5% interest per year. If Alice makes the first deposit one year from today, how much will be in the account immediately after she makes the final deposit in Year 3?

2. Annuity due

Now suppose Alice's twin brother Alvin thinks that his sister's savings plan is a good idea, so he decides to copy her by also depositing \$400 each year for three years in a saving account that pays 5% interest annually. But Alvin plans to make his first deposit today rather than one year from today. How much will be in the account immediately after she makes the final deposit in Year 3?

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3. PV of an ordinary annuity

Suppose that Alice has decided that she wants to pay herself \$400 each year for the next three years rather than deposit these amounts in her saving account. If she can invest a lump-sum account in a savings account that pays 5% interest per year, how much money does she need to deposit it today to accomplish her goal?

4. PV of an annuity due

Suppose that Alvin again wants to copy his sister. But Alvin plans to make the first \$400 withdrawal from his savings account immediately after opening the account rather than at the end of the year. Then, how much money does he need to deposit it today to accomplish his goal?