

Simple vs. Compound Interest | Worksheet



Matching

Match the definition in Column A with the term in Column B.

Column A

- _____ Yearly interest rate, including fees and costs.
- _____ Interest calculated only on the original amount.
- _____ Estimates years to double money with compound interest.
- _____ Interest on both principal and accumulated interest.
- _____ Original amount borrowed or invested.

Column B

- a. Compound Interest
- b. Simple Interest
- c. APR
- d. Principal
- e. Rule of 72

Multiple Choice

1. **Why might compound interest be more beneficial than simple interest?**
 - a. It accumulates faster over time.
 - b. It is easier to calculate.
 - c. It results in lower total returns.
 - d. It does not add interest to the principal.
2. **Which of the following is an example of compound interest?**
 - a. A savings account where interest is calculated annually only on the initial deposit of \$1,000.
 - b. A savings account that adds interest to the initial \$1,000 deposit plus any accumulated interest each month.
 - c. A loan where interest is calculated only on the principal amount borrowed each year.
 - d. A bond that pays a fixed interest rate on the original investment at the end of its term.
3. **Using the Rule of 72, at what interest rate will your investment double in 9 years?**
 - a. 4%
 - b. 6%
 - c. 8%
 - d. 10%
4. **Considering a credit card with a 20% APR, which scenario minimizes the impact of this interest rate?**
 - a. Paying the full balance each month.
 - b. Making the minimum payment each month.
 - c. Making bi-weekly payments of half the minimum payment.
 - d. Transferring the balance to a new card every six months.

Application

You decide to buy the PragerStation 5 game console, which costs \$350. Instead of paying the full amount upfront, you choose to charge it to your credit card with an APR of 20%. You plan to pay off the balance in 12 months. Using an online interest calculator, estimate how much you



will pay in total by the end of the year if you make equal monthly payments. Consider how compound interest affects your total payment.

Instructions:

1. Access an online compound interest calculator.
2. Enter the principal amount (\$350), the annual interest rate (20%), the time period (1 year), and the compounding frequency (monthly).
3. Calculate the approximate (round to the nearest hundredth) total amount paid by the end of the year. \$_____
4. What did your calculation show about the total cost of the PragerStation 5 after one year of monthly payments?
 - a. The total cost is exactly \$350, as the monthly payments cover the principal only.
 - b. The total cost is less than \$400, indicating minimal interest was added.
 - c. The total cost is between \$400 and \$420, showing the impact of compounded interest.
 - d. The total cost exceeds \$420, reflecting high-interest accumulation over the year.

Simple vs. Compound Interest | Answer Key

Matching

Match the definition in Column A with the term in Column B.

Column A

- c. Yearly interest rate, including fees and costs.
- b. Interest calculated only on the original amount.
- e. Estimates years to double money with compound interest.
- a. Interest on both principal and accumulated interest.
- d. Original amount borrowed or invested.

Column B

- a. Compound Interest
- b. Simple Interest
- c. APR
- d. Principal
- e. Rule of 72

Multiple Choice

1. Why might compound interest be more beneficial than simple interest?

- a. It accumulates faster over time.
- b. It is easier to calculate.
- c. It results in lower total returns.
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2. Which of the following is an example of compound interest?

- a. A savings account where interest is calculated annually only on the initial deposit of \$1,000.
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3. Using the Rule of 72, at what interest rate will your investment double in 9 years?

- a. 4%
- b. 6%
- c. 8%
- d. 10%

4. Considering a credit card with a 20% APR, which scenario minimizes the impact of this interest rate?

- a. Paying the full balance each month.
- b. Making the minimum payment each month.
- c. Making bi-weekly payments of half the minimum payment.
- d. Transferring the balance to a new card every six months.

Application

Using an online compound interest calculator and setting up equal monthly payments to pay off the balance in 12 months, you will pay approximately \$32.42 per month. By the

end of the year, the total amount paid would be approximately \$389.06. This includes the interest accrued due to the 20% APR, compounding monthly.

Answer:

b. The total cost is less than \$400, indicating minimal interest was added.