



## Simple Interest

- Concept of Simple Interest
- Problems related to missing rate, principal and time for Simple Interest
- Problems related to interest/amount being n times of Principal
- Data Sufficiency Questions



#### **Basic Terms:**

- ➤ INTEREST: It is money paid by a borrower for using the lender's money for a specified period of time. Denoted by I.
- > PRINCIPAL: The original sum borrowed. Denoted by P.
- > TIME: The time period for which the money is borrowed. Denoted by T
- > RATE OF INTEREST: The rate at which interest is calculated on the original sum. Denoted by R.
- ➤ AMOUNT: Amount is Sum of Principal plus Interest. Denoted by A



**Simple Interest (SI):** The method of calculating the interest amount for a particular principal amount of money at some rate of interest.

### Formula Of Simple Interest (S.I.)

$$S.I. = \frac{P \times R \times T}{100}$$



1. A sum fetched a total simple interest of Rs. 929.20 at the rate of 8% per annum in 5 years. What is the sum?

A] Rs. 2563

B] Rs. 2323

C] Rs. 1223

D] Rs. 2353



2. In what time will Rs. 72 become Rs. 81 at 6 (1 / 4) % per annum simple interest?

A] 2 Years
B] 4 Years

C] 3 Years
D] 5 Years



3. A sum of Rs. 1600 gives a simple interest of Rs. 252 in 2 years and 3 months. The rate of interest per annum is:

A] 5 %

C] 6 %

B] 7 %

D] 5 (1 / 2) %



4. Find the simple interest on Rs. 68,000 at 16(2/3)% per annum for a period of 9 months?

A] Rs. 8500 B] Rs. 3200

C] Rs. 2100 D] Rs. 4300



5. What sum of money must be given at simple interest for six months at 4% per annum in order to earn Rs. 150 interest?

A] Rs. 5000

B] Rs. 7500

C] Rs. 10000

D] Rs. 15000



6. A sum of money becomes 7 / 6 of itself in 3 years at a certain rate of simple interest. The rate per annum is :

A] 5 (5 / 9) %

C] 18 %

B] 6 (5/9) %

D] 25 %



7. The simple interest on a certain sum of money at the rate of 5% per annum for 8 years is Rs. 840. Rate of interest for which the same amount of interest can be received on the same sum after 5 years is:

A] 7% per annum

B] 8% per annum

C] 9% per annum

D] 10% per annum



8. At some rate of simple interest, A lent Rs. 6,000 to B for 2 years and Rs. 1,500 to C for 4 years and received Rs. 900 as interest from both of them together. The rate of interest per annum was

A] 5 %
B] 7 %

C] 6 %



9. A person invested 50% of his sum at 10% per annum. 50% of rest at 16% per annum and the rest at 20% per annum. What would be the annual rate of interest, if the interest is calculated on the whole sum?

A] 15 % B] 10 %

C] 12.5 % D] 14 %



10. A sum of money lent out at simple interest amounts to Rs. 720 after 2 years and to Rs.

1020 after a further period of 5 years. The sum is:

A] Rs. 500 B] Rs. 600

C] Rs. 700 D] Rs. 1000



11. If a sum of money amounts to Rs. 12,900 and Rs. 14,250 at the end of 4th year and 5th year respectively at a certain rate of simple interest, then the rate of interest is

A] 10 % B] 20 %

C] 15 %
D] 18 %



12. If the SI on a certain sum of money for 3 years at the rate of 12.5% is Rs. 3500 less than its principal. Find SI?

A] Rs. 1,444

B] Rs. 1,884

C] Rs. 2100

D] Rs. 3,232



13. A certain sum of money becomes three times of itself in 20 years at simple interest. In how many years does it become double of itself at the same rate of simple interest?

A] 8 Years B] 10 Years

C] 12 Years
D] 14 Years



14. A sum of money at simple interest trebles itself in 15 years. It will become 5 times of itself in

A] 25 Years B] 20 Years

C] 30 Years D] 24 Years



15. The simple interest on a certain sum for 8 months at 4% per annum is 129 less than the simple interest on the same sum for 15 months at 5% per annum. The sum is :

A] Rs. 3600 B] Rs. 3000

C] Rs. 2580 D] Rs. 2400



16. A sum of 1550 was lent partly at 5% and partly at 8% simple interest. The total interest received after 3 years is Rs. 300. The ratio of money lent at 5% to that at 8% is :

A] 5:8 B] 8:5

C] 31:6 D] 16:15



17. A sum of Rs. 4000 is lent out in two parts, one at 8% simple interest and the other at 10% simple interest. If the annual interest is Rs. 352, the sum lent at 8% is

A] Rs. 2400 B] Rs. 2500

C] Rs. 2600 D] Rs. 2700



18. A sum of Rs. 2800 is divided into two parts in such a way that the interest on both the parts is equal. If the first part is lent at 9% p.a. for 5 years and second part is for 6 years at 10% p.a., find the two sums.

A] Rs. 1800, Rs. 1000

C] Rs. 1400, Rs. 1400

B] Rs. 1600, Rs. 1200

D] Rs. 1300, Rs. 1500



19. A sum of Rs. 10,000 is lent partly at 8% and remaining at 10% per annum. If the yearly interest on the average is 9.2%, the two parts are :

A] Rs. 4000, Rs. 6000

B] Rs. 4500, Rs. 6500

C] Rs. 5000, Rs. 5000

D] Rs. 4400, Rs. 5600



20. A person invests money in three different schemes for 6 years, 10 years and 12 years at 10 per cent, 12 per cent and 15 per cent simple interest respectively. At the completion of each scheme, he gets the same interest. The ratio of his investment is

A] 6:3:2 B] 2:3:4

C] 3:4:6 D] 3:4:2



21. A sum of Rs. 7,930 is divided into three parts and given on loan at 5% simple interest to A, B and C for 2, 3 and 4 years respectively. If the amounts of all three are equal after their respective periods of loan, then A received a loan of

A] Rs. 3050 B] Rs. 2760

C] Rs. 2750 D] Rs. 2800



22. Ram bought a bike for Rs. 60,000. He paid Rs. 10000 cash down and the rest at the end of 2 years at 15% simple interest. How much more did he pay as simple interest?

A] Rs. 15000

B] Rs. 25000

C] Rs. 35000

D] Rs. 50000



23. A father left a will of Rs.35 lakhs between his two daughters aged 8.5 and 16 such that they may get equal amounts when each of them reach the age of 21 years. The original amount of Rs.35 lakhs has been instructed to be invested at 10% p.a. simple interest. How much did the elder daughter get at the time of the will?

A] Rs. 17.5 Lakhs

B] Rs. 20 Lakhs

C] Rs. 21 Lakhs

D] Rs. 19 Lakhs



- 24. What is the sum which earned interest?
- I. The total simple interest was Rs. 9000 after 9 years.
- II. The total of sum and simple interest was double of the sum after 6 years.
- (A)If the data in statement I alone is sufficient to answer the question.
- (B) If the data in statement II alone is sufficient to answer the question.
- (C) If the data either in statement I alone or statement II alone are sufficient to answer the question.
- (D) If the data given in both I and II together are not sufficient to answer the question.
- (E) If the data in both the statements I and II together are necessary to answer the question.



- 25. A man borrowed a total sum of Rs. 24000 from two moneylenders. For one loan, he paid interest @ 7 % p.a. and for the other 9% p.a. How much money did he borrow at each rate?
- I. The sum of the interest after one year was ₹ 2025.
- II. The interest on one sum was twice that on the other.
- (A)If the data in statement I alone is sufficient to answer the question.
- (B) If the data in statement II alone is sufficient to answer the question.
- (C) If the data either in statement I alone or statement II alone are sufficient to answer the question.
- (D) If the data given in both I and II together are not sufficient to answer the question.
- (E) If the data in both the statements I and II together are necessary to answer the question.



# Any Doubts???

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