11

Simple Interest

Q1. Calculate the simple interest in each of the following cases and fill in the blanks in the following table:

Principal	Rate	Time	Simple Interest
₹2000	10% p.a.	6 months	
₹5100	$12\frac{2}{3}$% p.a.	73 days	
₹3000	2% per month	15 months	

Q2. Fill in the blanks:

a. 12% rate of interest per annum means that interest paid on ₹_____ for one year is ₹12.

b. 4.5% rate of interest quarterly means that interest paid on ₹100 for _____ months is ₹4.5.

c. 5% rate of interest half yearly means that interest paid on ₹100 for _____ months is ₹5.

d. 13.5% rate of interest per month means that interest paid on ₹100 for _____ month is ₹13.5.

Q3. Choose the correct option:

The ratio between the simple interest calculated for a sum 'P' for a time period 'T' at the rate of interest R% **per annum**, and the simple interest calculated for the same sum and time period at the rate of interest R% **every three months** is:

a. 1 : 3

b. 1 : 4

c. 4 : 1

d. 3 : 1

Q4. Mr. Shyam borrowed money for 2 years and 5 months at the rate of $10\frac{1}{2}$% p.a. How much money will she return if she borrowed ₹4800?

Answer: _____

Q5. Jatin borrowed ₹25000 from Ganesh at the rate of $11\frac{1}{5}$% p.a. for 5 years. At the end of the time period he settled the account by giving a motorcycle and paying ₹10,000 cash to Ganesh. Find the value of the motorcycle.

Answer: _____

Q6. At what rate will ₹500 amount to ₹750 in 2 years?

Answer: _____

Q7. In how much time will a sum of money triple itself at 12.5% p.a.?

Answer: _____

Q8. Lakshmi borrowed some money from a bank for her daughter's hostel fee. After 4 years she paid ₹64,000 to settle the account. If the rate of interest was 7% p.a., find the sum of money borrowed by Lakshmi initially.

Answer: _____

Q9. Manish deposited a sum of money in a bank for 20 years at a certain rate of interest. The amount at the end of the fourth and fifth years was ₹3375 and ₹3656.25 respectively. On the basis of this information fill in the blanks given below:

a. Interest earned each year = ₹_____

b. Interest earned at the end of 20 years = ₹ _____

c. Principal deposited by Manish initially = ₹ _____

d. Amount Manish will get after 20 years = ₹_____

Q10. What sum of money at the rate of interest 11% p.a for 5 years will produce the same interest as ₹15,400 at the rate of interest 8% p.a. for 15 years?

Answer: _____

Answers

1.

Principal	Rate	Time	Simple Interest
₹2000	10% p.a.	6 months	₹100
₹5100	$12\frac{2}{3}$% p.a.	73 days	₹129.20
₹3000	2% per month	15 months	₹900

2. a. 100

b. 3

c. 6

d. 1

3. (b) 1:4

4. ₹5514

5. ₹29,000

6. 25% per annum

7. 16 years

8. ₹50,000

9. a. 281.25; b. 5625; c. 2250; d.7875

10. ₹33,600