Name: **Grade:** **Score:**

Worksheet #2

Learning goal: Students will be able to understand and can compare compound interest and simple interest.

Instructions: Calculate and compare the amount of simple and compound interest.

Q. No.	GIVEN	AMOUNT(C.I.)	AMOUNT(S.I.)	COMPARE
1.	P = ₹3,000, r = 4%, n = 2 years			
2.	P = ₹4,500, r = 6%, n = 3 years			
3.	P = ₹6,000, r = 8%, n = 4 years			
4.	P = ₹12,000, r = 10%, n = 5 years			
5.	P = ₹8,000, r = 12%, n = 2 years			
6.	P = ₹18,000, r = 15%, n = 3 years			
7.	P = ₹25,000, r = 20%, n = 4 years			

Name: **Grade:** **Score:**

Worksheet #2(Answer)

COMPARING SIMPLE INTEREST AND COMPOUND INTEREST

Learning goal: Students will be able to understand and can compare compound interest and simple interest.

Instructions: Calculate and compare the amount of simple and compound interest.

Q. No.	GIVEN	AMOUNT(C.I.)	AMOUNT(S.I.)	COMPARE
1.	P = ₹3,000, r = 4%, n = 2 years	$A = 3000\left(1+\frac{4}{100}\right)^2$ ₹3,244.80	$A = 15000 + \left[\frac{15000 \times 15 \times 3}{100}\right]$ ₹3,240	C.I. > S.I. by ₹4.80
2.	P = ₹4,500, r = 6%, n = 3 years	$A = 4500\left(1+\frac{6}{100}\right)^3$ ₹5,359.56	$A = 4500 + \left[\frac{4500 \times 6 \times 3}{100}\right]$ = ₹5,310	C.I. > S.I. by ₹49.56
3.	P = ₹6,000, r = 8%, n = 4 years	$A = 6000\left(1+\frac{8}{100}\right)^4$ ₹8,162.93	$A = 6000 + \left[\frac{6000 \times 8 \times 4}{100}\right]$ = ₹7,920	C.I. > S.I. by ₹242.93
4.	P = ₹12,000, r = 10%, n = 5 years	$A = 12000\left(1+\frac{10}{100}\right)^5$ ₹19,326.12	$A = 12000 + \left[\frac{12000 \times 10 \times 5}{100}\right]$ = ₹18,000	C.I. > S.I. by ₹1,326.12
5.	P = ₹8,000, r = 12%, n = 2 years	$A = 8000\left(1+\frac{12}{100}\right)^2$ ₹10,035.20	$A = 8000 + \left[\frac{8000 \times 12 \times 2}{100}\right]$ = ₹9,920	C.I. > S.I. by ₹115.20
6.	P = ₹18,000, r = 15%, n = 3 years	$A = 18000\left(1+\frac{15}{100}\right)^3$ ₹27,337.50	$A = 18000 + \left[\frac{18000 \times 15 \times 3}{100}\right]$ = ₹26,100	C.I. > S.I. by ₹1,237.50
7.	P = ₹25,000, r = 20%, n = 4 years	$A = 25000\left(1+\frac{20}{100}\right)^4$ ₹51,840.00	$A = 25000 + \left[\frac{25000 \times 20 \times 4}{100}\right]$ ₹45,000	C.I. > S.I. by ₹6,840.00

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