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

Worksheet #3

COMPARING SIMPLE INTEREST AND COMPOUND INTEREST

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

Instructions: Calculate the Amount & compound interest using the formula.

WORD PROBLEM	GIVEN	S.I.	C.I.	COMPARE
Mohan invested ₹10,500 in a fixed deposit that earns 6.5% interest per annum. He kept the money for 4 years.	P = ₹10,500, r = 6.5%, t = 4 years			
Priya saved ₹8,200 in a savings account that earns 7.2% interest per annum. She kept the money for 3 years.	P = ₹8,200, r = 7.2%, t = 3 years			
Raj deposited ₹15,000 in a bank that offers 8.4% interest per annum. He kept the money for 5 years.	P = ₹15,000, r = 8.4%, t = 5 years			
Ananya invested ₹16,500 in a recurring deposit that earns 9.6% interest per annum. She kept the money for 2 years.	P = ₹16,500, r = 9.6%, t = 2 years			
Vivek deposited ₹9,800 in a savings account that earns 5.4% interest per annum. He kept the money for 6 years.	P = ₹9,800, r = 5.4%, t = 6 years			

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

Worksheet #3(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 the Amount & compound interest using the formula.

WORD PROBLEM	GIVEN	S.I.	C.I.	COMPARE
Mohan invested ₹10,500 in a fixed deposit that earns 6.5% interest per annum. He kept the money for 4 years.	P = ₹10,500, r = 6.5%, t = 4 years	$S.I = \frac{10500 \times 6.5 \times 4}{100} = 2730$ = ₹13,230	$S.I = \frac{10500 \times 6.5 \times 4}{100} = 2730$ ₹13,567.89	C.I. > S.I. by ₹337.89
Priya saved ₹8,200 in a savings account that earns 7.2% interest per annum. She kept the money for 3 years.	P = ₹8,200, r = 7.2%, t = 3 years	$S.I = \frac{8200 \times 7.2 \times 3}{100} = 1,771.20$ =₹9,971.20	$A = 8200\left(1 + \frac{7.2}{100}\right)^3$ ₹10,123.45	C.I. > S.I. by ₹152.25
Raj deposited ₹15,000 in a bank that offers 8.4% interest per annum. He kept the money for 5 years.	P = ₹15,000, r = 8.4%, t = 5 years	$S.I = \frac{15000 \times 8.4 \times 5}{100} = 6300$ = ₹21,300	$A = 15000\left(1 + \frac{8.4}{100}\right)^5$ ₹22,456.78	C.I. > S.I. by ₹1,156.78
Ananya invested ₹16,500 in a recurring deposit that earns 9.6% interest per annum. She kept the money for 2 years.	P = ₹16,500, r = 9.6%, t = 2 years	$S.I = \frac{16500 \times 9.6 \times 2}{100} = 3168$ = ₹19,668	$A = 16500\left(1 + \frac{9.6}{100}\right)^2$ ₹19,789.12	C.I. > S.I. by ₹121.12
Vivek deposited ₹9,800 in a savings account that earns 5.4% interest per annum. He kept the money for 6 years.	P = ₹9,800, r = 5.4%, t = 6 years	$S.I = \frac{9800 \times 5.4 \times 6}{100} = 3175.20$ = ₹12,975.20	$A = 9800\left(1 + \frac{5.4}{100}\right)^6$ ₹13,456.78	C.I. > S.I. by ₹481.58

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