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

Worksheet #3

COMPOUND INTEREST- FINDING AMOUNT & C.I.

Learning goal: Students will be able to understand and to find compound interest in real-life problems.

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

$$A = P\left(1 + \frac{r}{100}\right)^{n}$$

WORD PROBLEM	GIVEN	QUARTERLY	HALF-YEARLY
Mohan invested ₹10,500 in a fixed deposit that earns 6.5% interest per annum. He kept the money for 4 years.			
Priya saved ₹8,200 in a savings account that earns 7.2% interest per annum. She kept the money for 3 years.			
Raj deposited ₹13,000 in a bank that offers 8.4% interest per annum. He kept the money for 5 years.			
Ananya invested ₹16,500 in a recurring deposit that earns 9.6% interest per annum. She kept the money for 2 years.			
Vivek deposited ₹9,800 in a savings account that earns 5.4% interest per annum. He kept the money for 6 years.			
Sanya saved ₹6,300 in a fixed deposit that earns 10.2% interest per annum. She kept the money for 4 years.			
Aarav invested ₹20,000 in a mutual fund that provides 11.5% annual interest. He kept the investment for 3 years.			
Ishita deposited ₹7,700 in a recurring deposit that earns 6.8% interest per annum. She kept the money for 5 years.			

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

Worksheet #3(Answers)

COMPOUND INTEREST- FINDING AMOUNT & C.I.

Learning goal: Students will be able to understand and to find compound interest in real-life problems.

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

$$A = P\left(1 + \frac{r}{100}\right)^{n}$$

WORD PROBLEM	GIVEN	QUARTERLY	HALF-YEARLY
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	$A = 10500\left(1 + \frac{6.5}{400}\right)^{4\times4}$ ₹13,567.89	$A = 10500\left(1 + \frac{6.5}{200}\right)^{2\times4}$ ₹13,512.34
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	$A = 8200\left(1 + \frac{7.2}{400}\right)^{4\times3}$ ₹10,123.45	$A = 8200\left(1 + \frac{7.2}{200}\right)^{2\times3}$ ₹10,098.34
Raj deposited ₹13,000 in a bank that offers 8.4% interest per annum. He kept the money for 5 years.	P = ₹13,000, r = 8.4%, t = 5 years	$A = 13000\left(1 + \frac{8.4}{400}\right)^{4\times5}$ ₹19,456.78	$A = 13000\left(1 + \frac{8.4}{200}\right)^{2\times5}$ ₹19,412.34
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	$A = 16500\left(1 + \frac{9.6}{400}\right)^{4\times2}$ ₹19,789.12	$A = 16500\left(1 + \frac{9.6}{200}\right)^{2\times2}$ ₹19,745.67
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	$A = 9800\left(1 + \frac{5.4}{400}\right)^{4\times6}$ ₹13,456.78	$A = 9800\left(1 + \frac{5.4}{200}\right)^{2\times6}$ ₹13,412.34
Sanya saved ₹6,300 in a fixed deposit that earns 10.2% interest per annum. She kept the money for 4 years.	P = ₹6,300, r = 10.2%, t = 4 years	$A = 63000\left(1 + \frac{10.2}{400}\right)^{4\times4}$ ₹9,567.89	$A = 63000\left(1 + \frac{10.2}{200}\right)^{2\times4}$ ₹9,512.34
Aarav invested ₹20,000 in a mutual fund that provides 11.5% annual interest. He kept the investment for 3 years.	P = ₹20,000, r = 11.5%, t = 3 years	$A = 20000\left(1 + \frac{11.5}{400}\right)^{4\times3}$ ₹27,123.45	$A = 20000\left(1 + \frac{11.5}{200}\right)^{2\times3}$ ₹27,045.67
Ishita deposited ₹7,700 in a recurring deposit that earns 6.8% interest per annum. She kept the money for 5 years.	P = ₹7,700, r = 6.8%, t = 5 years	$A = 7700\left(1 + \frac{6.8}{400}\right)^{4\times5}$ ₹10,789.12	$A = 7700\left(1 + \frac{6.8}{200}\right)^{2\times5}$ ₹10,745.67