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

Worksheet #3

COMPOUND INTEREST-CALCULATE COMPOUND INTEREST

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

Instructions: Calculate the Compound Interest using the formula.

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

WORD PROBLEM	GIVEN	FORMULA	SUBSTITUTION
John deposited ₹3,000 in a savings account that earns 6% interest per annum, compounded annually. He kept the money in the account for 3 years.			
Emma deposited ₹4,500 in a fixed deposit that earns 5% interest per annum, compounded annually. She kept the money in the account for 2 years.			
Liam deposited ₹2,000 in a savings account that earns 4% interest per annum, compounded annually. He kept the money in the account for 4 years.			
Olivia deposited ₹5,000 in a fixed deposit that earns 7% interest per annum, compounded annually. She kept the money in the account for 3 years.			
Noah deposited ₹6,000 in a savings account that earns 3% interest per annum, compounded annually. He kept the money in the account for 5 years.			
Ava deposited ₹8,000 in a fixed deposit that earns 6% interest per annum, compounded annually. She kept the money in the account for 2 years.			
Ethan deposited ₹7,500 in a savings account that earns 5% interest per annum, compounded annually. He kept the money in the account for 4 years.			
Sophia deposited ₹10,000 in a fixed deposit that earns 8% interest per annum, compounded annually. She kept the money in the account for 3 years.			

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

Worksheet #3 (Answers)

COMPOUND INTEREST-CALCULATE COMPOUND INTEREST

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

Instructions: Calculate the Compound Interest using the formula.

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

WORD PROBLEM	GIVEN	FORMULA	SUBSTITUTION
John deposited ₹3,000 in a savings account that earns 6% interest per annum, compounded annually. He kept the money in the account for 3 years.	P = ₹3,000 r = 6% n = 3	$A = P\left(1 + \frac{r}{100}\right)^n$	CI = A - P $A = 3000(1 + \frac{6}{100})^3$
Emma deposited ₹4,500 in a fixed deposit that earns 5% interest per annum, compounded annually. She kept the money in the account for 2 years.	P = ₹4,500 r = 5% n = 2	$A = P\left(1 + \frac{r}{100}\right)^n$	CI = A - P $A = 4500(1 + \frac{5}{100})^2$
Liam deposited ₹2,000 in a savings account that earns 4% interest per annum, compounded annually. He kept the money in the account for 4 years.	P = ₹2,000 r = 4% n = 4	$A = P\left(1 + \frac{r}{100}\right)^n$	CI = A - P $A = 2000(1 + \frac{4}{100})^4$
Olivia deposited ₹5,000 in a fixed deposit that earns 7% interest per annum, compounded annually. She kept the money in the account for 3 years.	P = ₹5,000 r = 7% n = 3	$A = P\left(1 + \frac{r}{100}\right)^n$	CI = A - P $A = 5000(1 + \frac{7}{100})^3$
Noah deposited ₹6,000 in a savings account that earns 3% interest per annum, compounded annually. He kept the money in the account for 5 years.	P = ₹6,000 r = 3% n = 5	$A = P\left(1 + \frac{r}{100}\right)^n$	CI = A - P $A = 6000(1 + \frac{3}{100})^5$
Ava deposited ₹8,000 in a fixed deposit that earns 6% interest per annum, compounded annually. She kept the money in the account for 2 years.	P = ₹8,000 r = 6% n = 2	$A = P\left(1 + \frac{r}{100}\right)^n$	CI = A - P $A = 8000(1 + \frac{6}{100})^2$
Ethan deposited ₹7,500 in a savings account that earns 5% interest per annum, compounded annually. He kept the money in the account for 4 years.	P = ₹7,500 r = 5% n = 4	$A = P\left(1 + \frac{r}{100}\right)^n$	CI = A - P $A = 7500(1 + \frac{5}{100})^4$
Sophia deposited ₹10,000 in a fixed deposit that earns 8% interest per annum, compounded annually. She kept the money in the account for 3 years.	P = ₹10,000 r = 8% n = 3	$A = P\left(1 + \frac{r}{100}\right)^n$	CI = A - P $A = 10000(1 + \frac{8}{100})^3$