

Name: \_\_\_\_\_

Grade: \_\_\_\_\_

Score: \_\_\_\_\_

## Worksheet #4

## 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
Rahul deposited ₹2,500 in a savings account that earns 5% interest per annum, compounded annually. He kept the money in the account for 3 years.			
Priya deposited ₹6,000 in a fixed deposit that earns 7% interest per annum, compounded annually. She kept the money in the account for 2 years.			
Aarav deposited ₹4,000 in a savings account that earns 6% interest per annum, compounded annually. He kept the money in the account for 4 years.			
Ananya deposited ₹5,500 in a fixed deposit that earns 4% interest per annum, compounded annually. She kept the money in the account for 3 years.			
Kunal deposited ₹7,000 in a savings account that earns 3% interest per annum, compounded annually. He kept the money in the account for 5 years.			
Meera deposited ₹3,500 in a fixed deposit that earns 5% interest per annum, compounded annually. She kept the money in the account for 2 years.			
Aditya deposited ₹8,000 in a savings account that earns 6% interest per annum, compounded annually. He kept the money in the account for 4 years.			
Isha deposited ₹10,500 in a fixed deposit that earns 8% interest per annum, compounded annually. She kept the money in the account for 3 years.			

Name: \_\_\_\_\_

Grade: \_\_\_\_\_

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## Worksheet #4 (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
Rahul deposited ₹2,500 in a savings account that earns 5% interest per annum, compounded annually. He kept the money in the account for 3 years.	$P = ₹2,500$ $r = 5\%$ $n = 3$	$A = P\left(1 + \frac{r}{100}\right)^n$	$CI = A - P$ $A = 2500\left(1 + \frac{5}{100}\right)^3$
Priya deposited ₹6,000 in a fixed deposit that earns 7% interest per annum, compounded annually. She kept the money in the account for 2 years.	$P = ₹6,000$ $r = 7\%$ $n = 2$	$A = P\left(1 + \frac{r}{100}\right)^n$	$CI = A - P$ $A = 6000\left(1 + \frac{7}{100}\right)^2$
Aarav deposited ₹4,000 in a savings account that earns 6% interest per annum, compounded annually. He kept the money in the account for 4 years.	$P = ₹4,000$ $r = 6\%$ $n = 4$	$A = P\left(1 + \frac{r}{100}\right)^n$	$CI = A - P$ $A = 4000\left(1 + \frac{6}{100}\right)^4$
Ananya deposited ₹5,500 in a fixed deposit that earns 4% interest per annum, compounded annually. She kept the money in the account for 3 years.	$P = ₹5,500$ $r = 4\%$ $n = 3$	$A = P\left(1 + \frac{r}{100}\right)^n$	$CI = A - P$ $A = 5500\left(1 + \frac{4}{100}\right)^3$
Kunal deposited ₹7,000 in a savings account that earns 3% interest per annum, compounded annually. He kept the money in the account for 5 years.	$P = ₹7,000$ $r = 3\%$ $n = 5$	$A = P\left(1 + \frac{r}{100}\right)^n$	$CI = A - P$ $A = 7000\left(1 + \frac{3}{100}\right)^5$
Meera deposited ₹3,500 in a fixed deposit that earns 5% interest per annum, compounded annually. She kept the money in the account for 2 years.	$P = ₹3,500$ $r = 5\%$ $n = 2$	$A = P\left(1 + \frac{r}{100}\right)^n$	$CI = A - P$ $A = 3500\left(1 + \frac{5}{100}\right)^2$
Aditya deposited ₹8,000 in a savings account that earns 6% interest per annum, compounded annually. He kept the money in the account for 4 years.	$P = ₹8,000$ $r = 6\%$ $n = 4$	$A = P\left(1 + \frac{r}{100}\right)^n$	$CI = A - P$ $A = 8000\left(1 + \frac{6}{100}\right)^4$
Isha deposited ₹10,500 in a fixed deposit that earns 8% interest per annum, compounded annually. She kept the money in the account for 3 years.	$P = ₹10,500$ $r = 8\%$ $n = 3$	$A = P\left(1 + \frac{r}{100}\right)^n$	$CI = A - P$ $A = 10500\left(1 + \frac{8}{100}\right)^3$