

Name: _____

Grade: _____

Score: _____

Worksheet #5

FINDING COMPOUND INTEREST AND AMOUNT

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

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

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

| WORD PROBLEM | CALCULATION | C.I. = A - P | A = P + C.I. |
|---|-------------|--------------|--------------|
| Meera deposited ₹7,200 in a fixed deposit that earns 6.5% interest per annum. She kept the money for 4 years. | | | |
| Aditya invested ₹11,000 in a savings account that earns 5.2% interest per annum. He kept the money for 5 years. | | | |
| Priyanka deposited ₹9,500 in a bank that offers 7.8% interest per annum. She kept the money for 3 years. | | | |
| Ravi invested ₹16,000 in a recurring deposit that earns 8.2% interest per annum. He kept the money for 2 years. | | | |
| Sanya saved ₹4,800 in a savings account that earns 4.5% interest per annum. She kept the money for 6 years. | | | |
| Kunal deposited ₹10,500 in a fixed deposit that earns 9.5% interest per annum. He kept the money for 3 years. | | | |
| Neha invested ₹22,000 in a mutual fund that provides 10.8% annual interest. She kept the investment for 4 years. | | | |
| Arjun deposited ₹30,000 in a recurring deposit that earns 3.8% interest per annum. He kept the money for 5 years. | | | |

Name: _____

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Worksheet #5 (Answers)

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

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

| WORD PROBLEM | CALCULATION | C.I. = A - P | A = P + C.I. |
|---|--|--------------|--------------|
| Meera deposited ₹7,200 in a fixed deposit that earns 6.5% interest per annum. She kept the money for 4 years. | $A = 7200 \left(1 + \frac{6.5}{100} \right)^4$ $= 9,243.67$ | ₹2,043.67 | ₹9,243.67 |
| Aditya invested ₹11,000 in a savings account that earns 5.2% interest per annum. He kept the money for 5 years. | $A = 11000 \left(1 + \frac{5.2}{100} \right)^5$ $= 14,123.45$ | ₹3,123.45 | ₹14,123.45 |
| Priyanka deposited ₹9,500 in a bank that offers 7.8% interest per annum. She kept the money for 3 years. | $A = 9500 \left(1 + \frac{7.8}{100} \right)^3$ $= 11,892.34$ | ₹2,392.34 | ₹11,892.34 |
| Ravi invested ₹16,000 in a recurring deposit that earns 8.2% interest per annum. He kept the money for 2 years. | $A = 16000 \left(1 + \frac{8.2}{100} \right)^2$ $= 18,748.16$ | ₹2,748.16 | ₹18,748.16 |
| Sanya saved ₹4,800 in a savings account that earns 4.5% interest per annum. She kept the money for 6 years. | $A = 4800 \left(1 + \frac{4.5}{100} \right)^6$ $= 29,752.45$ | ₹1,443.89 | ₹6,243.89 |
| Kunal deposited ₹10,500 in a fixed deposit that earns 9.5% interest per annum. He kept the money for 3 years. | $A = 10500 \left(1 + \frac{9.5}{100} \right)^3$ $= 13,764.22$ | ₹3,264.22 | ₹13,764.22 |
| Neha invested ₹22,000 in a mutual fund that provides 10.8% annual interest. She kept the investment for 4 years. | $A = 22000 \left(1 + \frac{10.8}{100} \right)^4$ $= 33,147.29$ | ₹11,147.29 | ₹33,147.29 |
| Arjun deposited ₹30,000 in a recurring deposit that earns 3.8% interest per annum. He kept the money for 5 years. | $A = 30000 \left(1 + \frac{3.8}{100} \right)^5$ $= 36,123.45$ | ₹6,123.45 | ₹36,123.45 |