

calculating interest answer key



directions

Write the answers to the following questions in the blanks provided. Use the space below each problem to show how you arrived at your answers.

1. If you put \$200 in a savings account that paid 5.5% simple interest each year, how much interest would you earn in five years?

\$55

$$\begin{aligned} \$200 \times 0.055 &= \$11 \\ \$11 \times 5 &= \$55 \end{aligned}$$

2. If you put \$150 in a savings account that paid 6% compounded yearly, how much interest would you earn in five years?

\$50.73

$$\begin{aligned} \$150 \times 1.06 &= \$159 \text{ (after 1 year)} \\ \$159 \times 1.06 &= \$168.54 \text{ (after 2 years)} \\ \$168.54 \times 1.06 &= \$178.65 \text{ (after 3 years)} \\ \$178.65 \times 1.06 &= \$189.37 \text{ (after 4 years)} \\ \$189.37 \times 1.06 &= \$200.73 \text{ (after 5 years)} \end{aligned}$$

3. If you put \$25 each month into a savings account that paid a simple interest rate of 6.5% each year, how much would you have in your account at the end of two years?

\$639.00

	Amount of Deposit	Interest Rate	Months on Deposit	Periods/yr	Interest
<i>start of year 1</i>	25	0.065	12	12	1.63
	25	0.065	11	12	1.49
	25	0.065	10	12	1.35
	25	0.065	9	12	1.22
	25	0.065	8	12	1.08
	25	0.065	7	12	0.95
	25	0.065	6	12	0.81
	25	0.065	5	12	0.68
	25	0.065	4	12	0.54
	25	0.065	3	12	0.41
	25	0.065	2	12	0.27
	25	0.065	1	12	0.14
<i>end of year 1</i>	300				10.56

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