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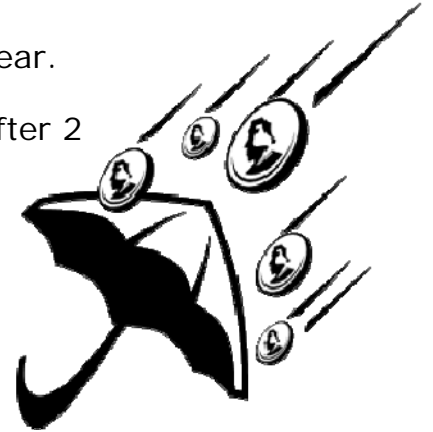
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Expressions for Exponential Functions - Step-by-Step Lesson

Sofia gives \$2,400 to her friend at 7% interest rate per year.

Sofia's friend pays back the entire amount plus interest after 2 years.

What was the total amount that Sofia received?



Explanation:

Step 1) We need to determine what we are looking for. In this case, we will need to find the amount of the loan + all interest accrued.

Step 2) The formula of compound interest is

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

Here, P = Principal amount

r = annual nominal interest rate

n = number of times the interest is compounded per year

t = number of years

$$A = 2400 \left(1 + \frac{7}{1}\right)^{1 \cdot 2}$$

$$A = 2,747.76$$

So, the answer is \$2,747.76

