

Compound Interest

Input File: compound.txt

Suppose Michael has P dollars to invest in an account that pays $r\%$ interest compounded quarterly. How much money does Michael have after t years?

The formula for compounded interest is:

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

Input:

The first line is the number of lines to follow. Each line will contain the initial investment into the bank account (P), the number of times the interest is compounded annually (n), the interest rate (r) (in decimals), followed by the time in years since the initial investment was deposited into the account (t) (in order).

Output:

Output the amount of money in the account after t years rounded **down** to the nearest integer, including a dollar sign (\$) before the value.

Example Input:

```
2
1000 4 0.035 5
2500 2 0.05 10
```

Example Output:

```
$1190
$4096
```