Problem 2 | **72 Points**

Horse Power

Program Name: horse.java Input File: horse.in

In a study published by Drs. Pagan and Hintz in the *Proceedings of the Equine Nutrition and Physiology Society*, a formula was developed for calculating calorie expenditure in horses while exercising:

$Y = (e^{3.20 + .0065s})(x)(z)$; where s is the speed in meters/minute, x equals the horse's weight in kilograms, z equals the amount of time exercising, and Y equals the calories expended.

Example:

So if a 400kg horse traveled 40,000 meters in 250 minutes, the speed would be 160 meters/minute, and the formula would look like:

$Y = (e^{3.20 + .0065(160)})(400)(250)$
$Y = 6940785$ (rounded to nearest integer)

Input

The first line of input will contain a single integer *n* indicating the number of data sets. Each data set will consist of a single line containing the horse's weight (in kg), the distance the horse traveled (in meters), and the amount of time it took to travel that distance (in minutes). These values will be separated by a single space.

Output

The output for each data set will be the amount of calories expended by the horse, given the formula above. Calories should be rounded to the nearest integer.

Example Input File

```
3
400 40000 250
500 30000 260
680 2000 2
```

Example Output To Screen

```
6940785
6751598
22191946
```