

Problem: Library Fine

Your local library needs your help! Given the expected and actual return dates for a library book, create a program that calculates the fine (if any). The fee structure is as follows:

1. If the book is returned on or before the expected return date, no fine will be charged (i.e.: .
2. If the book is returned after the expected return *day* but still within the same calendar month and year as the expected return date, .
3. If the book is returned after the expected return *month* but still within the same calendar year as the expected return date, the .
4. If the book is returned after the calendar *year* in which it was expected, there is a fixed fine of .

Input Format

The first line contains space-separated integers denoting the respective , , and on which the book was *actually* returned.

The second line contains space-separated integers denoting the respective , , and on which the book was *expected* to be returned (due date).

Constraints

-
-
-
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Output Format

Print a single integer denoting the library fine for the book received as input.

Sample Input

```
9 6 2015
6 6 2015
```

Sample Output

```
45
```

Explanation

Given the following return dates:

Actual:

Expected:

Because , we know it is less than a year late.

Because , we know it's less than a month late.

Because , we know that it was returned late (but still within the same month and year).

Per the library's fee structure, we know that our fine will be . We then print the result of as our output.

Solution:

```
int main()
{
    int rdate, rmonth, ryear;
    int edate, emonth, eyear;
    int fine;

    cin >> rdate >> rmonth >> ryear;
    cin >> edate >> emonth >> eyear;

    if(rdate > edate && rmonth == emonth && ryear == eyear)
        { cout << 15*(rdate-edate); }
    else if(rmonth > emonth && ryear == eyear)
        { cout << 500*(rmonth-emonth); }
    else if(ryear > eyear)
        { cout << "10000"; }
    else
        { cout << "0"; }
    return 0;
}
```

- Anshul Aggarwal