Library Fine

The Head Librarian at a library wants you to create a program that calculates the fine for returning a book after the return date. You are given the actual and the expected return dates. Calculate the fine as follows:

- 1. If the book is returned on or before the expected return date, no fine will be charged. In other words, the fine is \$0\$.
- 2. If the book is returned in the same calendar month as the expected return date, the fine = \$15\$ Hackos \$\times\$ the number of late days.
- 3. If the book is not returned in the same calendar month but in the same calendar year as the expected return date, the fine = \$500\$ Hackos \$\times\$ the number of late months.
- 4. If the book is not returned in the same calendar year, the fine is fixed at \$10000\$ Hackos.

Input

You are given the actual and the expected return dates in $D^M \sim Y$ format on two separate lines. The first line contains the $D^M \sim Y$ values for the actual return date and the next line contains the $D^M \sim Y$ values for the expected return date. Here's a sample:

9 6 2015 6 6 2015

Constraints:

\$1 \le D \le 31\$

\$1 \le M \le 12\$

\$1 \le Y \le 3000\$

The given date is a valid date on a Gregorian calendar.

Output

Print a single value representing the fine.

The sample output for the above input would be \$45\$.

Since the actual return date is \$3\$ days later than expected, the fine is calculated as \$15 \times 3 = 45\$ Hackos.