783 Trains

Two towns T1 and T2 are connected through a double railroad. The distance between T1 and T2 is d meters. From T1 to T2 the trains are leaving every t_1 seconds. From T2 to T1 the trains are leaving every t_2 seconds. The trains from T1 to T2 have a speed of v_1 m/s. The trains from T2 to T1 have a speed of v_2 m/s.

Your task is to write a program that computes the number of train "rendezvous" on the railroad which links T1 and T2, and which occur during the time interval $[0, tf]$ seconds.

We consider that:

a) at time 0 two trains are leaving (from T1 to T2, and from T2 to T1);

b) the input and output data are integers.

Input

Your program reads data sets, one per line, in the following format:
d $v1$ $v2$ $t1$ $t2$ tf.

Output

The program writes to the output the number of "rendezvous".

Sample Input

```
10  5  5  1  1  2
```

Sample Output

```
6
```