# STUDENT REPORT

## DETAILS

**Name**

VINODA KUMARA V

**Roll Number**

22BI24EC413-T

## EXPERIMENT

**Title**

DIWALI CONTEST

**Description**

Max is planning to take part in a Diwali contest at a Diwali Party that will begin at 8 PM and will run until midnight (12 AM) i.e., for 4 hours. He also needs to travel to the party venue within this time which takes him **P** minutes. The contest comprises of **N** problems that are arranged in order of difficulty, with problem 1 being the simplest and problem N being the most difficult. Max is aware that he will require 5*i minutes to solve the $i^{th}$ problem.

Your task is help Max find and return an integer value, representing the number of problems Max can solve and reach the party venue within the given time frame of 4 hours.

Note: Max will leave his home at exactly 8 PM to reach the party venue.

**Input Format:**

input1: An integer value N, representing the total number of problems.

input2: An integer value P, Representing the time to travel in minutes from his home to the party venue.

**Example:**

**Input:**

6

180

**Output:**

4

**Explanation:**

The amount of time left to solve the problems is 4*60-180=60 mins.

1st Problem - 5 mins, Time left = 60-5=55 mins

2nd Problem - 10 mins, Time left = 55-10=45 mins

3rd Problem  - 15 mins, Time left = 45-15=30 mins

4th Problem  - 20 mins, Time left = 30-20=10 mins

5th Problem  - 25 mins

So he can solve only 4 problems as he is not left with 25 mins to complete 5th problem.

**Source Code:**

```
N=int(input())
p=int(input())
time=240-p
timeleft=time

i=1
while i <= N and 5*i <= timeleft:
    timeleft -= 5*i
    i += 1
print(i-1)
```

## RESULT

5 / 5 Test Cases Passed | 100 %