

x = cost of normal burger
 y = cost of premium burger

x = rupees chef have

n = burger that he want to buy.

if ($x/x > n$) x y n x
 99 100 5 10

cout -1 $\frac{10}{99} < 5$

else if ($x/y \geq n$) x y n x
 9 10 10 200
 cout 0 n $\frac{200}{10} \geq 10$

else.

if ($y > 0$) {

cout $n - ans$

else n 0

ans. $\begin{cases} x + y = n \\ xa + yb \leq d \end{cases}$
 $\rightarrow xa + ya = an$

$$yb - ya = d - an$$

ans. $y = \frac{d - an}{b - a}$

2 10 4 12

$$y = \frac{x - an}{b - a}$$

$$= \frac{12 - 2 \times 4}{10 - 2}$$

$$= \frac{4}{8} = 0$$

$$4 - 0 = 4$$

4 8 10 50

$$= \frac{50 - 40}{4} = \frac{10}{4} = 2.5$$

$$\boxed{10 - 2 = 8}$$

so output 8 2.5

99

100 5 10

$$= \frac{10 - 495}{1} = \frac{-395}{1} = -1$$

9

10 10 200

$$= \frac{200 - 90}{1} = \frac{110}{1} = 10$$

$$10 - 10 = 0$$

so output

0 10