
Cool Water

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 512 megabytes

Tintin neither drinks tea, nor coffee. He drinks only pure water, moreover the temperature of water has to be exactly $x^\circ\text{C}$, otherwise Tintin can get burned, or get cold. He was very glad, when he had discovered a water cooler with pure water. In the cooler manual it says that on pressing the red button the cooler pours a milliliters of 100°C water, and on pressing the blue button — b milliliters of 0°C water.

Tintin knows that mixing n milliliters of 100°C water and m milliliters of 0°C water result into $n + m$ milliliters of $\left(\frac{100n}{n+m}\right)^\circ\text{C}$ water.

Tintin saves pure water, he wants to pour $x^\circ\text{C}$ water into his 1000-milliliter bottle, without wasting any water. What is the maximum volume of water in milliliters Tintin can pour into his bottle, by pressing red and blue buttons of the water cooler.

Input

The first line contains a single integer a ($1 \leq a \leq 1000$) — the volume of 100°C water in milliliters poured on pressing the red button.

The second line contains a single integer b ($1 \leq b \leq 1000$) — the volume of 0°C water in milliliters poured on pressing the red button.

The third line contains a single integer x ($0 \leq x \leq 100$) — the required temperature of water.

Output

Print single integer — the maximum volume of $x^\circ\text{C}$ water in milliliters that Tintin can pour.

Scoring

Testing data for this problem consists of 20 test cases. For solving each test case you are awarded 5 points. Total score is the total sum of points for all test cases. The testing result for each test case is shown.

Examples

standard input	standard output
10 20 30	1000
100 101 10	0
15 25 40	750

Explanations

In the first example Tintin can press the red button 30 times, and the blue one 35 times, then it fills his bottle with 1000 milliliters of 30°C water.

In the second example there is no way to get any water using only 1000-milliliter bottle.

In the third example Tintin can press the red button 20 times, and the blue one 18 times, then there are 750 milliliters of 40°C water in the bottle. Tintin can't get more 40°C water into his bottle.