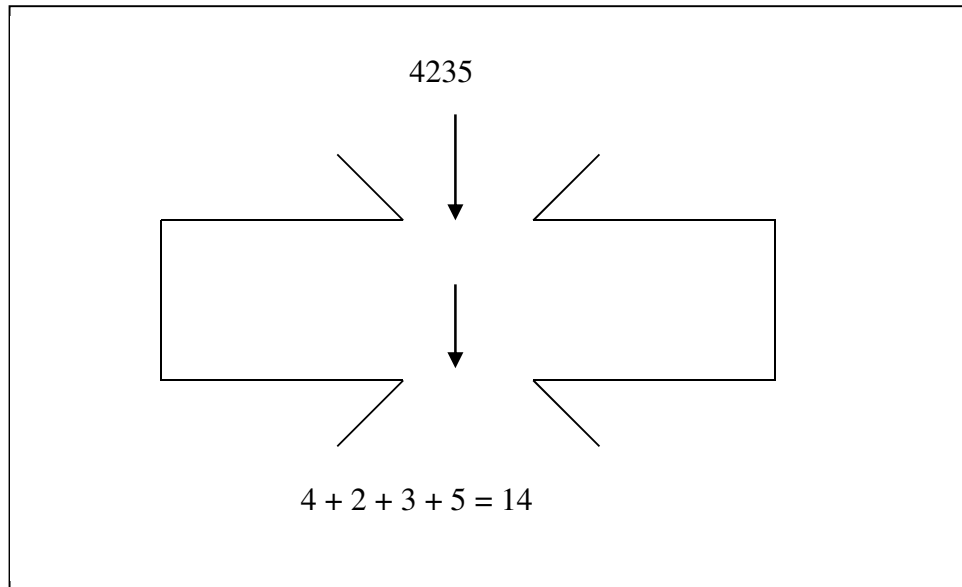


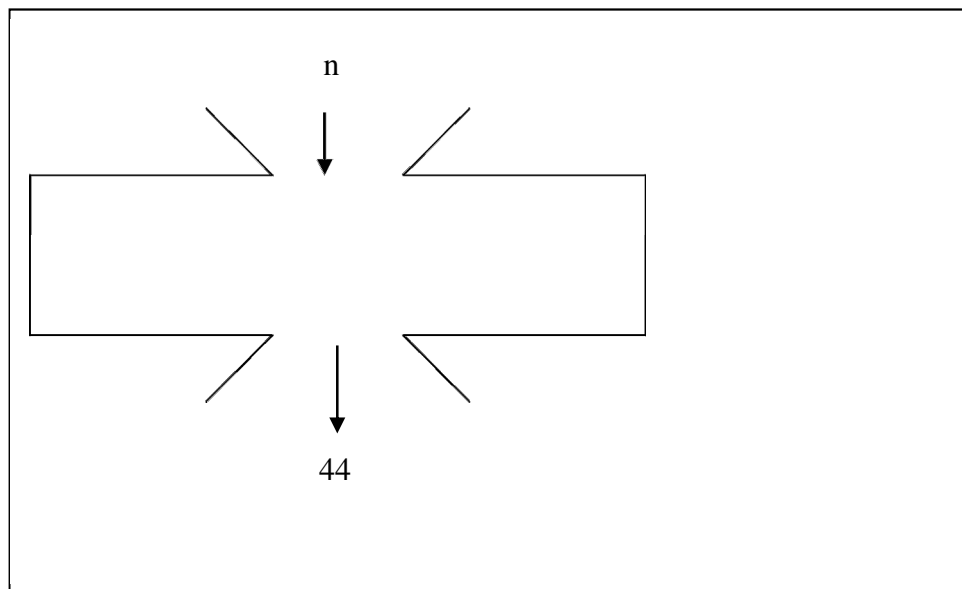
Written Test

Sample (10)

The following is a number making machine. When being input a 4-digit number, it outputs a number which equals the sum of all the digits of the input number. For example, if the input is 4235, then the output will be 14, as shown in the figure below:



- a. It is known that the output is 44 for the input of a 5-digit number n . What is/are the possible value(s) of n ?



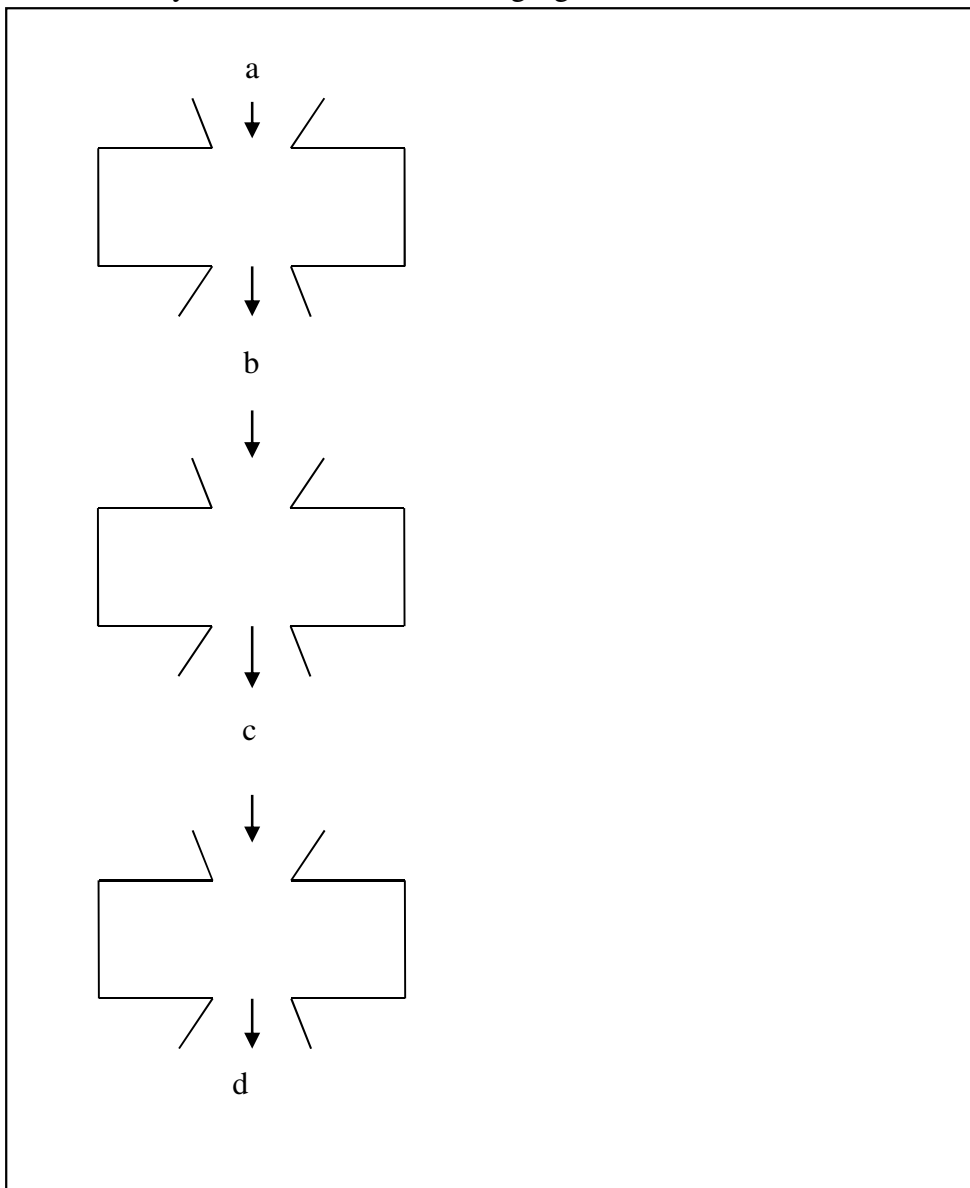
Answer: The possible value(s) of n is/are

_____.

Written Test

Sample (10)

b. It is given that a is a 4-digit number. After inputting a into the machine, we get b , c , d successively as shown in the following figure:



If $a + b + c + d = 2010$, what is/are the possible value(s) of a ?

Answer: The possible value(s) of a is/are

_____.