

How can I validate if a number is a legitimate credit card number?

PCI SSC FAQ | Article 1137 | July 2012

The Luhn formula or Modulus 10 is the algorithm most often used to validate Primary Account Numbers (PAN). The algorithm works as follows:

- double the value of alternate digits of the PAN beginning with the second digit from the right (for any resulting value greater than 10, subtract 9),
- add the calculated values as well as the values skipped in step 1 together,
- the total obtained in step 2 must be divisible by 10. Note that this formula tells you whether the payment card number is a possible and valid number, but not whether it's actually been issued and is active.

Source: <https://www.pcisecuritystandards.org/faqs/1137/>