

Casting out nines is a method for checking the accuracy of arithmetic.

You can *cast out nines* by adding the digits and then adding the digits of that answer until your final number is < 9 . OR, you can add the digits and then determine the remainder for that number after dividing by 9. OR, you can just determine the remainder after dividing the ORIGINAL number by 9.

Addition: Do the method of *casting out nines* for all addends. Add these numbers together and *cast out nines* again, if needed.

Cast out nines for the sum. Your sum is likely correct if the result from the addends is the same as the result for the sum.

Multiplication: Do the method of *casting out nines* for all factors. Multiply these numbers and *cast out nines* again, if needed.

Cast out nines for the product. Your product is likely correct if the result from the factors is the same as the result for the sum.

Do this for the homework problem: 84×47 .