

Two number riddles (made by Mr. York's Students)

1. There are two numbers. One number is 6 more than half the other. One number is 12 less than twice the other. What are the two numbers?
2. There are two numbers. One number is 12 times the other. One number is 3 more than 11 times the other. What are the two numbers?
3. There are two numbers. The sum of these two numbers is 66. Three times the smaller number is two more than the larger number. What are the two numbers?
4. There are two numbers. The difference of the two numbers is 14. 4 less than the smaller number is $\frac{1}{4}$ of the larger number. What are the two numbers?
5. There are two numbers. The larger number is greater than half of 100, the smaller number is not. The smaller number is a prime number, the larger number is not. The sum of the numbers is 10 less than the larger number multiplied by two. The sum of the second digits of both numbers is less than 11. What are the two numbers?
6. There are two numbers. The sum of the two numbers is 13. The product of the two numbers is 17.25. What are the two numbers?
7. There are two numbers. The difference of the two numbers is 2 less than the smaller number. Three times the smaller is 10 more than the larger. What are the two numbers?
8. The lesser of the two numbers is one less than two less than eight less than sixteen less than twice half the greater number. When the greater number is raised to the power of the lesser number, its result is complex infinity. If the lesser number is subtracted from the greater, the result is one more than two more than eight more than sixteen. Furthermore, the digits of the greater number add to a number with a digital root of 0 and when two more than eight more than sixteen is subtracted from the greater number, the result is one more than the lesser number. What are the two numbers?
9. Two of the lesser number divided by two less than one is twice the greater number. A third of the lesser number times a different third of the lesser number is equal to sixteen less than the greater number added to four times itself. Nine added to one third of the greater number times itself is the lesser number less than the lesser number divided by three less than two.
10. The greater number added to the lesser number is two more than five of the lesser number. Half of two of the lesser number less than the greater number is two more three of the lesser number. The two numbers multiplied together are one hundred times half of the lesser number. The lesser number times itself is six less than three of the greater number. The difference of the two numbers is five more than three of one less than the lesser number. The numbers do not have an even quotient. The product of the two numbers is even and is eighty-eight more than two times itself three quarters of the lesser number times.