

Puzzle 6

Mindreading

Instructions:

1. Think of a 5-6 digit number, that has at least two different digits in it. My example is 803225.
2. Create a second number by rearranging the digits of the previous number. My example is 320258.
3. Subtract the smaller number from the larger number. My example is $803225 - 320258 = 482967$
4. Cross out any non-zero digit of the difference. My example is 4829~~6~~7.
5. Announce the number you obtain by omitting the crossed out digit. My example is 48297.

If you tell the mindreader the last number, s/he can tell what digit you've crossed out. How?