

Once you have figured out what each trick does, try to explain why the tricks work.

Take any two-digit number.
Reverse the digits, and subtract your answer from your original number.
What do you notice?

Take any two-digit number.
Add its digits, and subtract your answer from your original number.
What do you notice?

Take any three-digit number.
Reverse the digits, and subtract your answer from your original number.
What do you notice?

Take any five-digit number.
Reverse the digits, and subtract your answer from your original number.
What do you notice?

Can you now devise some number tricks of your own?