Work in pairs for this exercise.

1. Student $A$ thinks of a number and writes it down on a piece of paper.
2. Student $B$ says "Divide that number by ... (a number chosen by the student)".
3. Student A performs the calculation, with a calculator if necessary.
4. .Student B then says "Multiply the answer that you got by (the same number)".
5. Student A performs the calculation.
6. Student $B$ says "what answer did you get?"
7. Student A tells student B.
8. Student $B$ then tells Student $A$ what number was written on the piece of paper.

Student $A$ and $B$ then reverse their roles. The number that the students divide and multiply by can be changed.

The pair then should make a general conclusion about what happens if you first divide something by a given number and then multiply the result by the same given number.

Does this work for every possible given number?

