

Operation Target

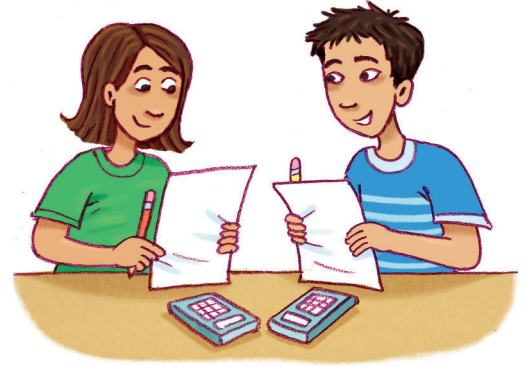
The goal is to use four digits and the operations $+$, $-$, \times , and \div to make as many different whole numbers as you can. This is a cooperative contest for two or three people.

Materials

- one or two pieces of paper for each player
- pencil for each player
- calculator that uses order of operations

Directions

- You must use each of the four digits 9, 5, 2, and 1 exactly once.
- You can use the operations $+$, $-$, \times , and \div once, more than once, or not at all.
- Parentheses and exponents are allowed.
- Make as many whole numbers as you can.
For example, $9 + 5 \times 2 - 1 = 18$.
- All division operations must give whole numbers. For example, $9 \div 2 = 4.5$ is not allowed.
- List the numbers you make and show how you made them.



Variations

- Play with different digits. For example, play with 3, 4, 5, and 9.
- Allow the digits to be arranged to make fractions and decimals.
- Allow the digits to be arranged into 2-digit numbers. For example, using the digits 9, 5, 2, and 1, the following is permitted: $12 \times 95 = 1140$.