

Problem Solving: Make an Organized List

Todd has given Maclan the information below to guess one or more 3-digit numbers that fit the clues.

- The ones digit is odd.
- The tens digit is greater than 8.
- The hundreds digit is less than 2.

Use the clues for each digit to make an organized list.

The ones digit is odd.

The odd numbers are 1, 3, 5, 7, and 9.

The tens digit is greater than 8.

The only digit greater than 8 is 9. The tens digit is 9.

The hundreds digit is less than 2.

The digit in the greatest place of a whole number cannot be 0. The hundreds digit is 1.

So, the numbers that fit the clues are 191, 193, 195, 197, and 199.

Make an organized list to solve.

1. Barbara, Lisa, and Maria are having their picture taken for the yearbook. List the ways that they can stand in a straight line for the picture. You can use their initials.

2. List all the 3-digit numbers that fit these clues.

- The hundreds digit is greater than 7.
- The tens digit is less than 2.
- The ones digit is the same as the hundreds digit.

3. **Reason** In how many ways can you make 10 cents using dimes, nickels, and pennies? List all the ways.
