A domino tile is a rectangular tile with a line dividing its face into two square ends. Each end is marked with a number of dots (also called pips) or is blank.

The domino on the left is a [3, 5] domino, since there are 3 pips on one end and 5 pips on the other end. The domino in the middle is a [0, 4] domino, since there are 0 pips on one end and 4 pips on the other end. The domino on the right is a [3, 3] domino, since there are 3 pips on one end and 3 pips on the other end.

We can also rotate the domino tiles:

The domino on the left is a [5, 3] domino. However, since each tile has just been rotated, [5, 3] and [3, 5] represent the same domino. Similarly, the domino in the middle is a [4, 0] domino. Note that [4, 0] and [0, 4] represent the same domino.

A 2-set of dominoes contains all the tiles with the number of pips on any end ranging from 0 to 2, and no two dominoes can be the same. A 2-set of dominoes has the following 6 tiles: [0, 0], [0, 1], [0, 2], [1, 1], [1, 2], [2, 2]. (Notice that the three dominoes [1, 0], [2, 0] and [2, 1] are not listed because they are the same as the three dominoes [0, 1], [0, 2] and [1, 2]).

A 10-set of dominoes contains all the tiles with the number of pips on any end ranging from 0 to 10, and no two dominoes can be the same. How many tiles are in a 10-set of dominoes?