

Urns of King Midas

King Midas made 4 Urns to carry his gold bars. For good luck he wrote a 4 digit number - one digit on each urn.

The number he chose was special: 1210. The "0 urn" contained the number of zeros in the number. The "1 urn" contained the number of ones in the number. The "2 urn" contained the number of twos in the number, and the "3 urn" contained the number of threes in the number.



For example, the "1 urn" has a 2 written on it which means that the number 1210 must have two ones.

Later King Midas made five urns. For good luck, what number should he put on them?

Extensions:

- What about even more urns?
- Are there an infinite number of solutions?

The Math in This Problem:

In this math puzzle, students are presented with King Midas' gold-filled urns. In order to keep the King from getting bad luck, they must figure out a way to keep the pattern consistent when adding more urns to his collection.