

## My Favorite Number

Find a 6 digit nonzero number so that when the number is multiplied by 2,3,4,5, or 6, the product is a rotation of the original number.

A rotation of a number takes digits from the front of the number and puts them at the end in the original order. For example the rotations of 37452 would be 74523, 45237, 52374, and 23745.