

WanderRings



*Designed by Vilmos Seresty and sold at the Atlanta 1996 Olympics.
(plastic, 25 rings + base, 7 inches wide by 3.5 inches tall)*

Five rings of each color numbered, 1 through 5. The only two legal moves are to *move 2 rings at a time* or to *move 3 rings at a time*. The posts are only long enough to hold 7 rings. After mixing up the rings, get them back to the solved puzzle where rings of each color on their correct base, arranged in order from 1 on the bottom to 5 on top. An easier puzzle is to ignore the numbers. Another puzzle is get five colors on each post (in the same order).

A Solution:

Assume we start with 5 rings on each post (if not, it is always easy to make it so). The following sequence temporarily "parks" the top ring of one post (call it A) on another post (peg B):

- **PARK:** Move 2 rings from B to A, then move 3 rings from A to B.
(You can also "double park" by repeating this operation twice.)
- **UNPARK:** Move 3 rings B to A, then move 2 rings from A to B.
(If double parked, repeat this twice, or if another post C currently has only 5 rings, you can put back the two rings in reverse order by moving 2 rings from B to C, 2 rings from B to A, and 2 rings from C to B.)

Using this idea, we can do the following two key transformations:

- The top rings of any two posts can be exchanged.
(In fact with double parking you can exchange the top two rings).
- The rings of a given post can be permuted in any order.
(The top 4 can each be parked on the other four posts so that they can be put back in any order. If the bottom ring also needs to be moved, it can be double parked with one of the rings that is going to one of the top 4 positions.)

The ability to permute the rings of a post combined with the ability to exchange the top rings of any two post suffices to solve the puzzle. Of course, additional shortcuts can be devised.

Directions That Came With WanderRings

