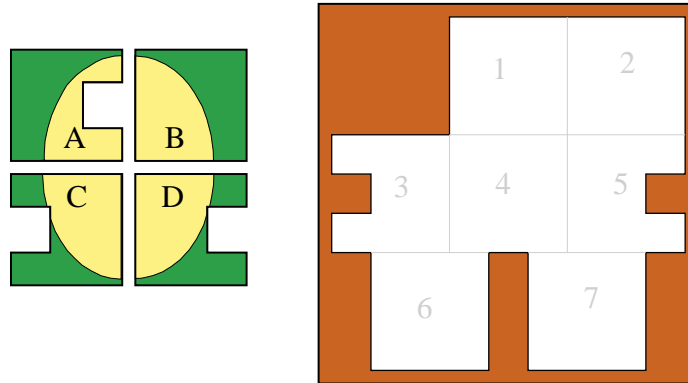


I U P U I
MATH CLUB TEASER #50

October 15, 2010
(due October 29, 2010)

SOLUTION

First, label the four pieces and the seven spaces in the tray as in the figure below.



The initial configuration of pieces

D	C
B	A

 starts at

1	2
4	5

, and the shortest solution goes as follows:

- | | |
|-------------------------|------------------------|
| 1. Move B from 4 to 6 | 12. Move D from 2 to 5 |
| 2. Move A from 5 to 7 | 13. Move B from 3 to 2 |
| 3. Move D from 1 to 5 | 14. Move D from 5 to 1 |
| 4. Move C from 2 to 3 | 15. Move C from 7 to 3 |
| 5. Move D from 5 to 2 | 16. Move D from 1 to 7 |
| 6. Move A from 7 to 1 | 17. Move C from 3 to 1 |
| 7. Move C from 3 to 7 | 18. Move A from 6 to 5 |
| 8. Move A from 1 to 5 | 19. Move C from 1 to 6 |
| 9. Move B from 6 to 1 | 20. Move A from 5 to 1 |
| 10. Move A from 5 to 6 | 21. Move D from 7 to 5 |
| 11. Move B from 1 to 3* | 22. Move C from 6 to 4 |

(* On this move, piece B does not fully fit in position 3)

SOLVED BY:

Captain Nemo, Aaron Goins, Puzzler.