

## GETTING DRESSED EXERCISE

Let's assume I'm putting on four items of clothes: pants, shirt, shoes and socks. In all the different ways I put on these clothes, which order will minimize the time for me to get dressed?

There are  $4 \times 3 \times 2 \times 1 = 24$  different orderings.

1. Pants Shirt Shoes Socks
2. Pants Shirt Socks Shoes
3. Pants Shoes Socks Shirt
4. Pants Shoes Shirt Socks
5. Pants Socks Shoes Shirt
6. Pants Socks Shirt Shoes
7. Shirt Shoes Socks Pants
8. Shirt Shoes Pants Socks
9. Shirt Pants Shoes Socks
10. Shirt Pants Socks Shoes
11. Shirt Socks Shoes Pants
12. Shirt Socks Pants Shoes
13. Shoes Socks Pants Shirt
14. Shoes Socks Shirt Pants
15. Shoes Pants Shirt Socks
16. Shoes Pants Socks Shirt
17. Shoes Shirt Pants Socks
18. Shoes Shirt Socks Pants
19. Socks Pants Shirt Shoes
20. Socks Pants Shoes Shirt
21. Socks Shirt Pants Shoes
22. Socks Shirt Shoes Pants
23. Socks Shoes Pants Shirt
24. Socks Shoes Shirt Pants

However, many of these orderings are impractical meaning that they either do not match up with society's standards or are not efficient. Let's eliminate some of those.

- ~~1. Pants Shirt Shoes Socks~~
2. Pants Shirt Socks Shoes
- ~~3. Pants Shoes Socks Shirt~~
- ~~4. Pants Shoes Shirt Socks~~
5. Pants Socks Shoes Shirt
6. Pants Socks Shirt Shoes
- ~~7. Shirt Shoes Socks Pants~~
- ~~8. Shirt Shoes Pants Socks~~
- ~~9. Shirt Pants Shoes Socks~~
10. Shirt Pants Socks Shoes
- ~~11. Shirt Socks Shoes Pants~~
12. Shirt Socks Pants Shoes
- ~~13. Shoes Socks Pants Shirt~~
- ~~14. Shoes Socks Shirt Pants~~
- ~~15. Shoes Pants Shirt Socks~~

- 16. ~~Shoes~~ ~~Pants~~ ~~Socks~~ ~~Shirt~~
- 17. ~~Shoes~~ ~~Shirt~~ ~~Pants~~ ~~Socks~~
- 18. ~~Shoes~~ ~~Shirt~~ ~~Socks~~ ~~Pants~~
- 19. Socks Pants Shirt Shoes
- 20. Socks Pants Shoes Shirt
- 21. Socks Shirt Pants Shoes
- 22. ~~Socks~~ ~~Shirt~~ ~~Shoes~~ ~~Pants~~
- 23. Socks Shoes Pants Shirt
- 24. ~~Socks~~ ~~Shoes~~ ~~Shirt~~ ~~Pants~~

From the ones left, how do I choose which one is the most efficient? In other words, which one is the optimum?