

1. 10 points Suppose that we have

- 4 history books
- 3 language books
- 7 math books
- 2 science books
- 4 psychology books

We want to arrange them on our bookshelf by subject. How many ways can we do this?

ANSWERS

1.

$$5! \times 4! \times 3! \times 7! \times 2! \times 4!.$$