

PUZZLING CARTOON

- FRAGILE PARCELS -



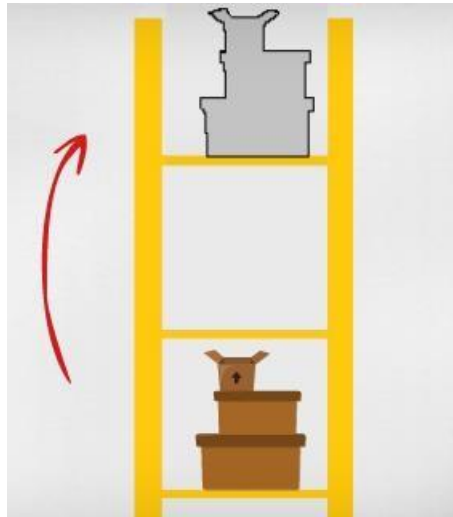
AMAZINGMATHS

Materials :

- Video of the puzzle
- Sheets of paper
- Pencils
- Written copies of the puzzle (optional)

The puzzle

Three parcels are piled up on the bottom shelf of a three-shelves rack, as we can see on the picture.



We want to move them to the highest shelf of the rack.

Careful, the parcels are fragile! We cannot place a big parcel on a smaller one.

We can only carry one at a time.

Plus, we cannot place the parcels side by side on the same shelf (because there is not enough room).

How can a person move these three fragile parcels on her own to the highest shelf in a maximum of 7 operations, without ever putting a parcel on the ground?



PUZZLE SOLUTION



The answer:

Place the smallest parcel on the top shelf, then the medium parcel on the middle shelf. Move the smallest parcel on top of the medium parcel, which is on the middle shelf. Then, take the biggest parcel and place it on the top shelf. We have a first parcel well placed. Place the smallest parcel on the bottom shelf. Then, place the medium parcel on the biggest parcel, which is on the top shelf. Finally, move the smallest parcel on top.

Detailed Explanations

To move all the parcels in a minimum of operations, we will have to place the biggest parcel on the top shelf as soon as possible, since it is the one that will be at the bottom of the pile. So, we first have to think about the best way to move the two smallest parcels to the middle shelf.