

PROBLEM OF THE WEEK

LABEL SHUFFLE

I have three containers> One has only red marbles, one has only blue marbles and the third an equal number of red and blue marbles. The labels on the containers have been intentionally switched so that each container is marked incorrectly.



Your task is to label the containers correctly without looking into the container. You can reach into any container and select one marble at a time. Can you now identify all three containers. If not select a second marble from any container. What is the fewest number of marbles you need to pick to guarantee correctly labeling each container. Be sure that you consider all possible outcomes in your explanation!