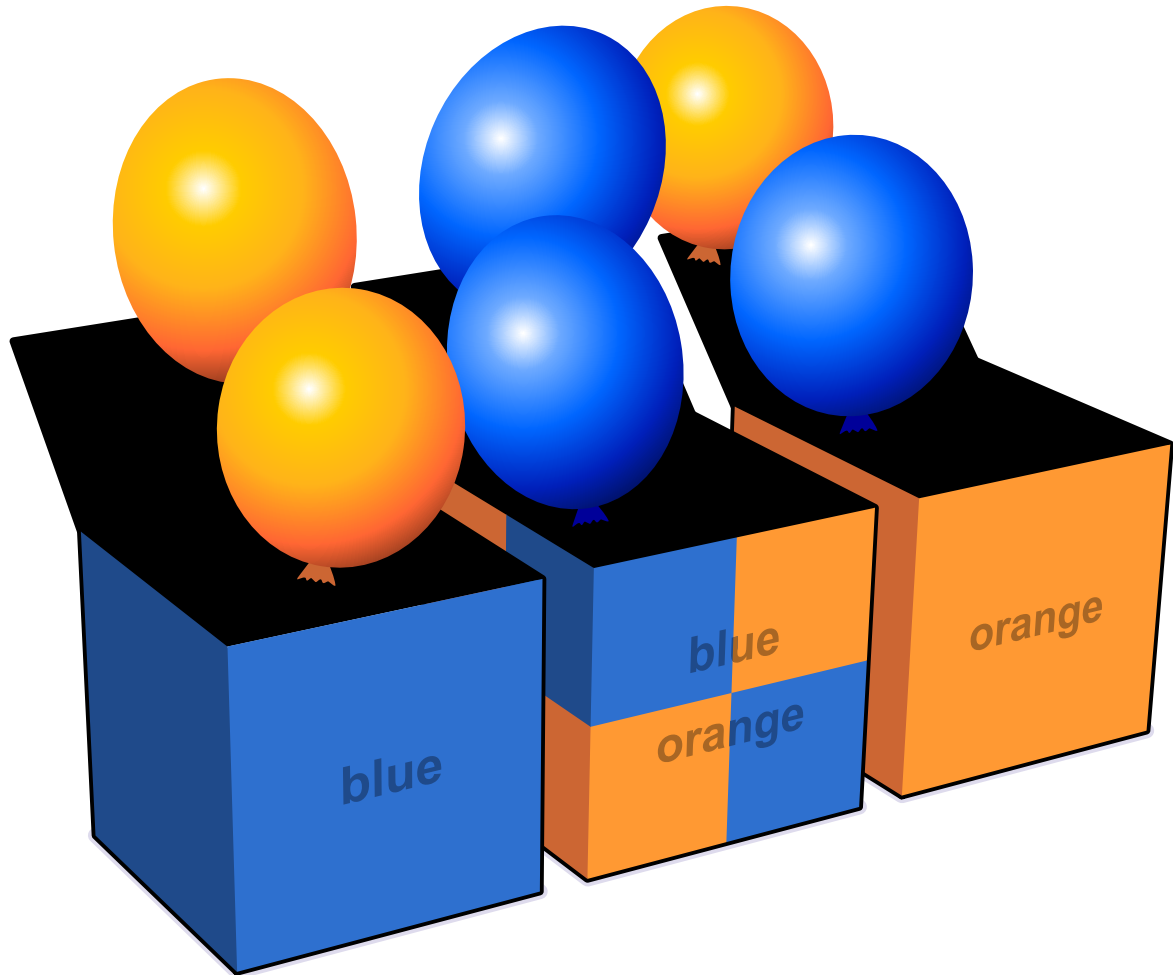


Three boxes contain blue and orange balloons. One box contains 2 blue balloons, another one contains 2 orange balloons, and a third one contains 1 blue and 1 orange balloon. The boxes have been labeled, but each of the labels is on a wrong box.

All three boxes have lids, and you cannot see what is in them. However, you are allowed to reach into any of the boxes without peeking and take one or two balloons out and look at them. Taking out as few balloons as possible, figure out what the correct labels should be.



Take one balloon from the box labeled “blue and orange”. This tells you whether that box contains all blue balloons or all orange balloons.

Suppose it contained all blue balloons. Then the box labeled “orange” cannot contain all blue balloons. Also it can’t contain all orange balloons, so it must contain blue and orange balloons. Then, the box labeled “blue” must contain all orange balloons.