Camping groups

A class of 24 students is planning a camping trip.

The school has tents that fit three people each and backpacks that can be shared one between two students.

The teacher wants the class to be split into cooking groups that will be as small as possible so that everyone sharing a tent or backpack with someone will be in the same cooking group.

How many students will be in each cooking group? Explain how you arrived at your answer.

