

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 will be in the same cooking group.



Also, each pair of students sharing a backpack will need to be in the same cooking group.

How many students will be in each cooking group?

Explain how you arrived at your answer.

1. Use counters or a diagram to show the 24 students in the class.
2. Group the students into tents (3 students in each tent).
3. Arrange the counters, or show on the diagram, how the packs may be shared (one between two).
4. What is the lowest number of cooking groups possible?