

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. How many tents are needed by the class?
2. How many packs are needed by the class?
3. How can the students be grouped to have a whole number of tents and packs per group?
4. What is the minimum size the cooking groups can be?