



Name _____ Date _____

Chapter 12 Review

Family Photo Opportunity

Eight members of Joaquin's family (including Joaquin and Irene) are eating a holiday dinner together. Joaquin has a new camera and wants to take their pictures in groups of some number (as large as possible) to make an album for those who could not come. Irene is worried that there won't be enough film for all those pictures. Help them figure out this problem.

1. How many different groups of two people can they form from those at the dinner? (Hint: A picture of Uncle Steve with Bill is the same as a picture of Bill with Uncle Steve.)
2. How many groups of three members each can be formed from the 8 people?
3. How many groups of four members each can be formed from 8 people?
4. How many groups of five members each can be formed from 8 people?
5. How many groups of six members each can be formed from 8 people?
6. Irene and Joaquin have 2 rolls of film with 36 exposures each. What is the largest size group they can use in their pictures?

Answers are located on page 125.