

## Module 4 Topic G Lessons 28-29 Student Copy

### Exercises

Solve each problem below using tables and algebraic methods. Then, check your answers with the word problems.

1. Indiana Ridge Middle School wanted to add a new school sport, so they surveyed the students to determine which sport is most popular. Students were able to choose among soccer, football, lacrosse, or swimming. The same number of students chose lacrosse and swimming. The number of students who chose soccer was double the number of students who chose lacrosse. The number of students who chose football was triple the number of students who chose swimming. If 434 students completed the survey, how many students chose each sport?
2. At Prairie Elementary School, students are asked to pick their lunch ahead of time so the kitchen staff will know what to prepare. On Monday, 6 times as many students chose hamburgers as chose salads. The number of students who chose lasagna was one third the number of students who chose hamburgers. If 225 students ordered lunch, how many students chose each option if hamburger, salad, and lasagna were the only three options?
3. The art teacher, Mr. Gonzalez, is preparing for a project. In order for students to have the correct supplies, Mr. Gonzalez needs 10 times more markers than pieces of construction paper. He needs the same number of bottles of glue as pieces of construction paper. The number of scissors required for the project is half the number of pieces of construction paper. If Mr. Gonzalez collected 400 items for the project, how many of each supply did he collect?
4. The math teacher, Ms. Zentz, is buying appropriate math tools to use throughout the year. She is planning on buying twice as many rulers as protractors. The number of calculators Ms. Zentz is planning on buying is one quarter of the number of protractors. If Ms. Zentz buys 65 items, how many protractors does Ms. Zentz buy?

### Homework

#### Lesson 29

Create tables to solve the problems, and then check your answers with the word problems.

1. On average, a baby uses three times the number of large diapers as small diapers and double the number of medium diapers as small diapers.
  - a. If the average baby uses 2,940 diapers, size large and small, how many of each size would be used?
  - b. Support your answer with equations.
2. Tom has three times as many pencils as pens but has a total of 100 writing utensils.
  - a. How many pencils does Tom have?
  - b. How many more pencils than pens does Tom have?
3. Serena's mom is planning her birthday party. She bought balloons, plates, and cups. Serena's mom bought twice as many plates as cups. The number of balloons Serena's mom bought was half the number of cups.
  - a. If Serena's mom bought 84 items, how many of each item did she buy?
  - b. Tammy brought 12 balloons to the party. How many total balloons were at Serena's birthday party?
  - c. If half the plates and all but four cups were used during the party, how many plates and cups were used?