SAMPLE MATERIAL

## Ratio Problems

RMC Denver Professional Development, Colorado

Topic: Developing Effective Fractions Instruction for K-8
Practice: Ratio, Rate, Proportion

When conducting professional development sessions on fraction operations, coaches from RMC Denver provide teachers with these word problems. The Comparing Ratios problem requires teachers to compare ratios using two different unit rates, while the Ratio Tables problem set provides several opportunities to practice using ratio tables to solve problems.

## Comparing Ratios



Two camps of Scouts are having pizza parties.
The Bear Camp ordered enough so that every 3 campers will have 2 pizzas. The leader of the Raccoons ordered enough so that there would be 3 pizzas for every 5 campers.

Did the Bear campers or the Raccoon campers have more pizza to eat?
Solve the problem without using any numeric algorithms such as cross products. You may draw pictures or use counters. Be prepared to defend your answer.

## Ratio Tables



1. A person who weighs 160 pounds on Earth will weigh 416 pounds on the planet Jupiter. How much will a person weigh on Jupiter who weighs 120 pounds on earth?
2. Cheese is $\$ 4.25$ per pound. How much will 12.13 pounds cost?
3. At the local college, 5 out of every 8 seniors live in apartments. How many of the 30 seniors who are mathematics majors are likely to live in an apartment?
4. The tax on a purchase of $\$ 20$ is $\$ 1.12$ How much tax will there be on a purchase of $\$ 45.50$
5. When in Australia you can exchange $\$ 4.50$ in U.S. dollars for $\$ 6$ Australian. How much is $\$ 17.50$ Australian in U.S. dollars?
6. How many pounds of birdseed can be purchased for $\$ 18$ if you can buy 28 pounds for $\$ 35$ ?
