

Name _____

Date _____

Solving Problems by Finding Equivalent Ratios

When Carla looked out at the school parking lot, she noticed that for every 2 minivans, there were 5 other types of vehicles. If there are 161 vehicles in the parking lot, how many of them are not minivans?

1. Last summer, at *Camp Okey-Fun-Okey*, the ratio of the number of boy campers to the number of girl campers was 8: 7. If there were a total of 195 campers, how many boy campers were there? How many girl campers?
2. The student-to-faculty ratio at a small college is 17: 3. The total of students and faculty is 740. How many faculty members are there at the college? How many students?
3. The Speedy Fast Ski Resort has started to keep track of the number of skiers and snowboarders who bought season passes. The ratio of the number of skiers who bought season passes to the number of snowboarders who bought season passes is 1: 2. If 1,250 more snowboarders bought season passes than skiers, how many snowboarders and how many skiers bought season passes?
4. The ratio of the number of adults to the number of students at the prom has to be 1: 10. Last year there were 477 more students than adults at the prom. If the school is expecting the same attendance this year, how many adults have to attend the prom?

When Carla looked out at the school parking lot, she noticed that for every 2 minivans, there were 5 other types of vehicles. If there are 161 vehicles in the parking lot, how many of them are not minivans?

5 out of 7 vehicles are not minivans. $7 \times 23 = 161$. So, $5 \times 23 = 115$. 115 of the vehicles are not minivans.

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104 boys and 91 girls are at Camp Okey-Fun-Okey.

2. The student-to-faculty ratio at a small college is 17:3. The total of students and faculty is 740. How many faculty members are there at the college? How many students?

111 faculty members and 629 students are at the college.

3. The Speedy Fast Ski Resort has started to keep track of the number of skiers and snowboarders who bought season passes. The ratio of the number of skiers who bought season passes to the number of snowboarders who bought season passes is 1:2. If 1,250 more snowboarders bought season passes than skiers, how many snowboarders and how many skiers bought season passes?

1,250 skiers bought season passes, and 2,500 snowboarders bought season passes.

4. The ratio of the number of adults to the number of students at the prom has to be 1:10. Last year there were 477 more students than adults at the prom. If the school is expecting the same attendance this year, how many adults have to attend the prom?

53 adults have to be at the prom to keep the 1:10 ratio.