

Ratio & Proportion

multi-step

1. If there were 7 males for every 12 females at the dance, how many females were there if there were 21 males at the dance?
2. David read 40 pages of a book in 12 minutes. How many pages will he read in 80 minutes if he reads at a constant rate? *If there are 480 pages in the book, how long will it take to read the book?*
3. On a map, one inch represents 70 miles. If Las Vegas and Reno are six inches apart on the map, what is the distance between the cities? *If the car you are driving gets 25 miles per gallon and gas costs \$3.00 per gallon, how much would you expect to spend on gas for the trip?*
4. Bob had 21 problems correct on a math test that had a total of 25 questions, what percent grade did he earn? (In other words, how many questions would we expect him to get correct if there were 100 questions on the test?). *If his average on his first three tests was 76, what is Bob's average now?*

5. If there should be three calculators for every 4 students in an elementary school, how many calculators should be in a classroom that has 44 students? If a new school is scheduled to open with 600 students, how many calculators should be ordered? If each calculator costs \$95.00, how much should the principal budget for calculators at the new school?
6. If your car can travel 350 miles on 20 gallons of gas, at that rate, how much gas would you have to purchase to take a cross country trip that was 3000 miles long? If gas costs \$3.00 per gallon and you average 60 miles per hour, how much would you expect to spend on gas and how long will the trip take?