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## Section 7.3: Ratios and Proportions

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1. Write a ratio based on each of the following:
  - (a) Three out of every four voters surveyed favor ballot measure 5
  - (b) There are five times as many boys as girls in Mr. Wright's physics class.
  - (c) There are half as many sixth-graders in Fremont School as eighth-graders.
2. A family uses 5 gallons of milk every 3 weeks. At that rate how many gallons of milk will they need to purchase in a year's time?
3. By reading just a few pages at night before falling asleep, Randy finished a 428 page book in  $4\frac{1}{2}$  weeks. He just started a new book of 676 pages. About how long should it take him to finish the new book if he reads at the same rate.



7. The ratio of weeks of school to weeks of vacation is 9:4. How many weeks of vacation are there in one year?
8. In the library the ratio of fiction to nonfiction books is 3:4. If the library has a total of 63 books, how many are fiction?
9. The local petting zoo has 42 animals where three out of seven are mammals. How many are mammals?

10. Five out of eight students attending the local parade play a musical instrument. If 140 students played musical instruments, how many students attended the parade?
11. A recipe calls for  $1\frac{1}{3}$  cups of chopped onions. However, you only have  $\frac{3}{4}$  cups of chopped onions. How much of the recipe can you make? (Exact answer only)
12. You developed a recipe to enter in a local cooking contest. As developed, the recipe requires  $1\frac{1}{4}$  cups of wine for 3 people. However, contest rules state that the recipe must feed 8 people. How many cups of wine must be used for the recipe that is entered in the cooking contest? (Exact answer only)