
Section 7.3: Ratios and Proportions

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.

4. There is approximately 2 pounds of muscle for every 5 pounds of body weight. For a 90 pound child, how much of the weight is muscle?

5. Jim found out that after working for 9 months he had earned 6 days of vacation time. How many days per year does he earn at this rate?

6. Jennifer weighs 160 pounds on earth and 416 pounds on Jupiter. Find Amy's weight on Jupiter if she weighs 120 pounds on earth.

7. The ratio of weeks of school to weeks of vacation is 9:4. How many weeks of vacation are there in one year?

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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?