

Math 101, Littlefield

Homework: Ratio Proportion Problems

Assignment: Solve any 3 of the following 7 problems. Extra credit for extra problems solved.

100 Percent of Daily Allowance of Iron

A common foodstuff is found to contain .00125% iron. The serving size is 87.0 grams. If the recommended daily allowance is 18mg of iron, how many servings would a person have to eat to get 100% of the daily allowance of iron?

Administering Insulin

If a doctor prescribes 30 units of insulin in 500 ml to be administered over 2 hours, how many drops per minute should be administered if the set is calibrated to deliver 20 drops per ml?

Time, Speed, Distance, and Unit Conversion

If a car moves at 44 mph for 50 minutes, how many kilometers does it travel?

Analyzing a Prescription for the Correct Dose

A 46 lb child is prescribed 1 Tsp of medicinal syrup three times a day. There are 2 mg of medicine per 5 ml of syrup, and a safe dose is 0.1 mg per kg of body weight. Is the prescribed dose safe?

The Difference between Calculating Markup and Profit Margin

If we have fixed costs of \$50,000 on a product and want to have a profit margin of 25%, how much should we charge the customer to buy it?

Ratio and Proportion: Beaches and Hawks

On a map, the scale states that 3 inches represent 125 miles. Two beaches are 5.2 inches apart. How far apart are they in miles?

Ratio Set-Up Problem

Concrete can be made by mixing cement, sand, and gravel in the ratio 3:6:8. How much gravel is needed to make 850 m³ of concrete?

Source: These are selected from http://mathforum.org/library/drmath/sets/mid_ratio.html.