

6.15 Multistep Proportional Reasoning

Chapter 6: Ratios, Rates, and Proportional Reasoning

Name: _____

Date: _____

Class/Period: _____

Problem 6.227 A team has defenders:strikers = $3 : 5$ among 96 players. The entire team travels, and each bus holds 32 players. Find the number of defenders and buses needed.

Problem 6.230 A machine produces 375 parts in 2.5 hours. It runs 7 hours per day for 6 days. Find total parts.

Problem 6.228 A recipe uses flour:sugar = $7 : 2$. A bakery uses 31.5 cups of flour per batch and makes 8 batches. Find sugar used.

Problem 6.231 A paint mixture has red:blue:white = $2 : 3 : 5$. It fills 18 cans of 2.5 liters each. Find liters of blue paint.

Problem 6.229 A map scale is 1 cm:12 km. A route is 8.5 cm long and a car averages 68 km/h. Find travel time.

Problem 6.232 A runner travels 5 km in 24 minutes. Find the speed in km/h and time for 18 km.

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Problem 6.233 A 1:40 model has length 28 cm. Shipping costs \$3.50 per actual meter. Find the stated shipping cost using actual length.

Problem 6.235 A drink is concentrate:water = 2 : 7. The mixture costs \$0.60 per liter of concentrate and \$0.05 per liter of water. Find the cost of 45 liters.

Problem 6.234 Six workers make 90 items in 5 hours. Find the time for 8 workers to make 192 items.

Problem 6.236 A car travels 180 miles at 45 mph and 120 miles at 60 mph. Fuel efficiency is 30 mpg. Find total time and fuel used.