

**EXTRA PRACTICE 21**  
**Solving Problems Using Proportions**  
**Use after Section 5.4**

Name \_\_\_\_\_

---

Solve using proportions. (Be careful! Some of the problems include numbers which will not be needed in finding the solution.)

1. A family of 5 travels 1230 miles in 4 days. At the same rate, how long would the family take to travel 5535 miles? \_\_\_\_\_
2. A 1987 automobile goes 229.5 miles on 9 gallons of gasoline. At the same rate, how far would the automobile go on 20 gallons of gasoline? \_\_\_\_\_
3. For a school picnic, 2 pounds of 85% lean hamburger meat serves 9 people. How many pounds of the same hamburger would be needed to serve 170 people? Round to the nearest whole pound. \_\_\_\_\_
4. A 6-cylinder car is driven 37,500 miles in 3 years. At that rate, in how many years will the car have 100,000 miles on it? \_\_\_\_\_
5. On a 50-pound bag of fertilizer, the directions say to apply 2.5 lb of fertilizer for every 100 square feet 4 times a year. How many pounds of fertilizer are needed for 2500 square feet each time? \_\_\_\_\_
6. On a scale model of an airplane,  $\frac{1}{2}$  in. represents 2 ft. The wingspan on the actual airplane is 44 ft. How long will the model's wingspan be? \_\_\_\_\_
7. A punch recipe which serves 12 people uses 1 cup of orange juice and  $1\frac{1}{4}$  cups of pineapple juice. How much pineapple juice will be needed to serve 72 people?  
\_\_\_\_\_
8. There are 36 barleycorns (a barleycorn is an old unit of measure) in 12 inches. How many barleycorns are there in 8 inches? \_\_\_\_\_
9. The directions on a box of food coloring say, to obtain the color orange, mix 2 parts of red coloring to 3 parts of yellow. You have already used 8 drops of red. How many drops of yellow are needed? \_\_\_\_\_
10. \$900 in the bank earns \$76.50 in simple interest. How much would \$400 earn in the same amount of time at the same interest rate? \_\_\_\_\_