

Name _____

5-5A Lesson Master**Questions on SPUR Objectives**

See pages 320–323 for objectives.

USES Objective G

1. A chemistry set that had originally cost \$140 is on sale for \$125.
Find the discount rate. _____
2. Fiona's salad dressing is made of 4 parts olive oil, 3 parts lemon juice and 1 part vinegar. How many ounces of each ingredient should she use to make 3 cups (24 ounces) of the sauce?

In 3 and 4, consider the following information. Companies use statistics to judge which TV shows are the most popular as well as to determine advertising fees. A show's rating is the percent of households with TVs that watch the show. A show's share is the percent of households with the TV *on* that watch the show. Suppose a city has 3,000,000 households with TVs, and at 10 P.M., 1,560,000 are watching TV.

3. Suppose 27,000 households are watching the Channel 5 news.
What is the show's rating? _____
4. Channel 2 is airing a new sitcom. How many households would have to watch it in order for it to have a share of 20%? _____
5. Brian is in a Rock-Paper-Scissors tournament. He's played 40 games and won 65% of the games he's played. If he plays 20 more games, how many would he have to win in order to have won 70% of his games? _____
6. Carl wants to make a shade of orange that requires 7 parts of red with 4 parts of yellow. If he plans on using 12 gallons of yellow paint, how many gallons, in total, of paint will he use? _____
7. The staff of a high school newspaper consists of 7 seniors, 9 juniors, 9 sophomores, and one supervising teacher. What is the ratio of sophomores to the total staff of the newspaper? _____
8. A digital camera costs \$150 in the airport duty-free shop (where there is no sales tax), and \$135 in a city store, where there is a sales tax of 6.25%. Which camera is cheaper? _____
9. Julian found that the ratio of students in his school who had heard of the Egyptian pharaoh Akhenaten to those who hadn't is 7 : 98. If there are 630 students in his school, how many of them had heard of Akhenaten? _____