Questions on SPUR Objectives
See pages 320–323 for objectives.

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?

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?