

Name \_\_\_\_\_

**5-7A Lesson Master****Questions on SPUR Objectives**

See pages 320–323 for objectives.

**USES** Objective H

1. A radio show did a program on superheroes, and asked the audience at home if they would rather have the power to fly or to be invisible. 87 men called in, of whom 56 preferred the power to fly. 72 women called in, of whom 61 preferred the power to become invisible.
  - a. What was the relative frequency of callers who preferred invisibility? \_\_\_\_\_
  - b. What was the relative frequency of male callers? \_\_\_\_\_
2. A multiple choice question on a test has four possible answers. In a class that took the test, 12 students answered A, 5 students answered B, 5 students answered C, and one student answered D. What is the relative frequency of students who answered B or C? \_\_\_\_\_
3. *Multiple Choice.* Michael tossed a fair coin  $n$  times. He found that the relative frequency of *heads* was exactly 0.42. Which of the following is a possible value for  $n$ ?
 

A 0                  B 10                  C 101                  D 50

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4. Heidi listened to 20 songs on the radio, but only liked  $t$  of them. She changed stations, and listened to four more songs, all of which she liked. The relative frequency of songs that Heidi liked, in total, was 25%. Find the value of  $t$ . \_\_\_\_\_

**USES** Objective K

5. *True or False.* A class took a test and the scores were tallied. If there were 12 students at or below the 50th percentile, then there must have been 6 students at or below the 25th percentile. \_\_\_\_\_
6. Robert was running in a race with 31 other people. Robert had hoped to be in the 75th percentile or higher. When Robert was nearing the end of the race, he noticed that nine people had already completed the race. Did Robert still have a chance to achieve his goal? Explain your answer.
 

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7. Ten people arrange themselves according to height from shortest to tallest. Jeffrey is in the 75th percentile. How many people in the group are taller than Jeffrey? \_\_\_\_\_