

Name \_\_\_\_\_

**13-6A Lesson Master****Questions on SPUR Objectives**

See pages 833–835 for objectives.

**PROPERTIES** Objective E

In 1 and 2, an integer is given.

- Tell whether the integer is divisible by 2 and state a reason why.
- Tell whether the integer is divisible by 3 and state a reason why.
- Tell whether the integer is divisible by 5 and state a reason why.
- Tell whether the integer is divisible by 9 and state a reason why.

1. 47,514

2. 810

a. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

d. \_\_\_\_\_

3. Which integer(s) in 1 and 2 above is(are) divisible by 6?  
Explain why. \_\_\_\_\_

4. Prove: If a 3-digit number is subtracted from the number formed by reversing its digits, then the difference is divisible by 9.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. The number  $76x4$ , written in base 10, is divisible by 9.  
What is the value of  $x$ ? \_\_\_\_\_

6. The number  $581x$ , written in base 10, is divisible by 6.  
What is the value of  $x$ ? \_\_\_\_\_