13-5A Lesson Master

Questions on SPUR Objectives
See pages 833–835 for objectives.

**PROPERTIES** Objective E

In 1–4, true or false. If false, provide a counterexample.

1. All even numbers are divisible by 6. __________________________

2. The sum of two even numbers is even. __________________________

3. The product of two odd numbers is even. __________________________

4. The quotient of two even numbers is even. __________________________

5. Consider the statement: If two numbers are both divisible by 3, then their sum is divisible by 6.
   a. Is this statement true or false? If false, provide a counterexample. __________________________

   b. Use rows of dots to explain why this statement is true or false. __________________________

6. Prove: If a number is divisible by 5, then its square is divisible by 25.

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7. Prove: If the sum of two numbers is divisible by 12 and one of the numbers is divisible by 36, then the other number is divisible by 12.

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