

Name _____

13-2A Lesson Master

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

PROPERTIES Objective D

In 1–5, tell whether the statement is true or false.

1. If $\begin{cases} 3x + 4y = 5 \\ x = 6y + 20 \end{cases}$, then $x = 5$ and $y = -2.5$. _____
2. A number is divisible by 6 if and only if it is divisible by both 2 and 3. _____
3. A quadratic equation has one solution if and only if the discriminant is zero. _____
4. If the sides of a triangle have lengths 5, 8, and 14, then the triangle is a right triangle. _____
5. If the vertex of a parabola is $(2, -13)$, then an equation of the parabola is $y = (x - 2)^2 + 13$. _____

USES Objective G

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------------------------|-------------------------|------------------------------|-------------------------|------------------------------|
| School 8–3 Soup Kitchen 7–9 | School 8–3 Dance 5–7 | School 8–3 Gymnastics 4–6 | School 8–3 Dance 5–7 | School 8–3 Gymnastics 4–6 |

6. Cambria’s weekly schedule is shown above. Cambria told a friend, “If it’s Friday, then I don’t have dance lessons.”
 - a. Is Cambria’s statement true or false?
If false, provide a counterexample. _____
 - b. Write the converse of Cambria’s statement. _____
 - c. Is the converse true or false? If false, provide a counterexample. _____
7. Today is February 29th, so tomorrow must be March 1st.
 - a. Write the sentence as an if-then statement.

 - b. Write the converse.

 - c. If either the statement or its converse is not true, correct them so that they are both true, and rewrite the sentence as an if-and-only-if statement.

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