

These three statements can be logically combined in the following way:

When the headlight switch is on, the headlights are draining energy from the battery. *If the headlights are on all night*, the battery will have no energy the next morning. With no energy in the battery, *the car will not start*.

The highlighted words can be written in the form of a **conditional statement** or simply a **conditional**, as follows:

If the headlights are on all night, then the car will not start.

The phrase *the headlights are on all night* is the hypothesis of the conditional. The phrase *the car will not start* is the conclusion.

EXAMPLE 1 Writing the Hypothesis and Conclusion

Identify the hypothesis and conclusion of each conditional.

- a. If $2x = 8$, then $x = 4$.
- b. If a roof is properly constructed, then the building will not leak when it rains.