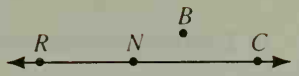
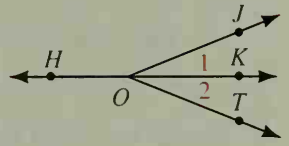
Self-Test 2



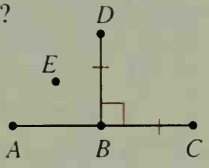
1. Write three names for the line pictured.
2. Name the ray that is opposite to $\overrightarrow{NC}$.
3. Is it correct to say that point B lies between points N and C?
4. When $RN = 7$, $NC = 3x + 5$, and $RC = 18$, what is the value of x?

Complete.



5. $m\angle 1 + m\angle 2 = m\angle$ ___?___
6. If $\angle 1 \cong \angle 2$, then ___?___ is the bisector of $\angle$ ___?___.
7. $m\angle HOK =$ ___?___, and $\angle HOK$ is called a(n) ___?___ angle.

8. Which of the four things stated *can't* you conclude from the diagram?



   a. A, B, and C are collinear. **b.** $\angle DBC$ is a right angle.
   c. B is the midpoint of $\overline{AC}$. **d.** E is in the interior of $\angle DBA$.

Apply postulates and theorems to complete the statements.

9. Through any two points ___?___.
10. If points A and B are in plane Z, ___?___.
11. If two planes intersect, then ___?___.
12. If there is a line j and a point P not in the line, then ___?___.

Chapter Summary

1. The concepts of *point*, *line*, and *plane* are basic to geometry. These undefined terms are used in the definitions of other terms.
2. $\overleftrightarrow{AB}$ represents a line, $\overline{AB}$ a segment, and $\overrightarrow{AB}$ a ray. AB represents the length of $\overline{AB}$; AB is a positive number.
3. Two rays with the same endpoint form an angle.
4. Congruent segments have equal lengths. Congruent angles have equal measures.
5. Angles are classified as acute, right, obtuse, or straight, according to their measures.
6. Diagrams enable you to reach certain conclusions. However, judgments about segment length and angle measure must not be made on the basis of appearances alone.
7. Statements that are accepted without proof are called postulates. Statements that are proved are called theorems.
8. Postulates and theorems in this chapter deal with distances, angle measures, points, lines, and planes.