Module Test B   Module 8
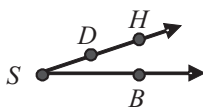
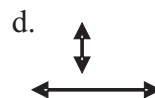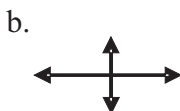**Circle the correct answer for each problem.**

1. Which is NOT a correct way to name the angle shown?

   a. ∠BSD   b. ∠S   c. ∠HSD   d. ∠HSB

2. Which diagram shows intersecting lines that are not perpendicular?

   a.   b.   c.   d.

3. ∠A and ∠B are complementary and $m\angle B = 39°$. What is $m\angle A$?

   a. 39°   b. 51°   c. 90°   d. 141°

4. ∠G and ∠H are vertical angles and $m\angle G = 15°$. What is $m\angle H$?
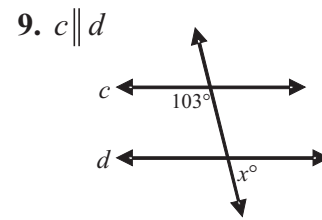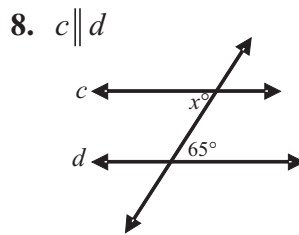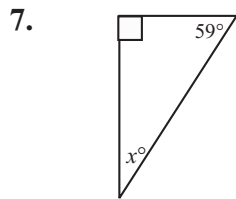
   a. 15°   b. 30°   c. 75°   d. 165°

5. Which can be the angle measures of an acute triangle?

   a. 35°, 55° and 80°   b. 40°, 70° and 70°   c. 30°, 60° and 90°   d. 5°, 15° and 160°

6. Which can be the side lengths of a scalene triangle?

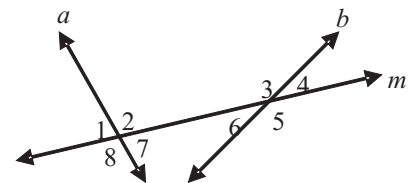   a. 2 m, 4 m, 5 m   b. 3 m, 3 m, 4 m   c. 2 m, 5 m, 5 m   d. 9 m, 9 m, 9 m

Find the value of *x*.

7.

8. $c \parallel d$

9. $c \parallel d$

Write all the ways to name the figure using symbols.

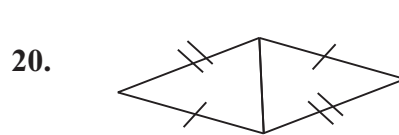**10.**
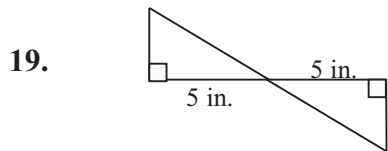
11.

12.
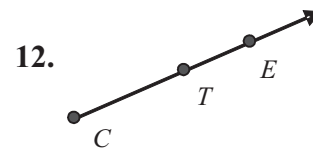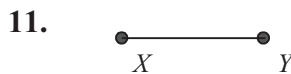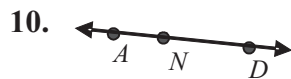
Line *m* is a transversal intersecting lines *a* and *b*.
Describe each pair of angles as vertical, corresponding,
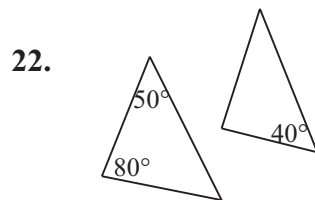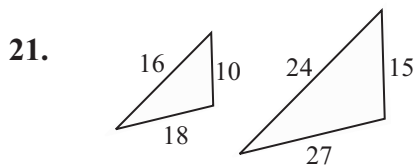**alternate interior, alternate exterior, or none of the these.**

13.   ∠2 and ∠4   **14.**   ∠3 and ∠5

15.   ∠1 and ∠5   **16.**   ∠7 and ∠3

17.   ∠6 and ∠8   **18.**   ∠1 and ∠6

Determine whether the triangles are congruent. If so, write *SSS Congruence*, *SAS Congruence*, or *ASA Congruence*.

19.

5 in.
5 in.

20.

Determine whether the triangles are similar. If so, write *AA Similarity* or *SSS Similarity*.

21.

16   10   24   15

18   27

22.

50°   40°

80°

23. $\triangle CAP \cong \triangle TOE$

a. Which segment must be congruent to $\overline{CP}$?

b. Which angle must be congruent to $\angle E$?

24. From a bus stop, Monette walked 25 feet due east and then 40 feet due south. Tell how to find Monette's direct distance to the bus stop. Find the distance to the nearest tenth of a foot.

25. Write a similarity statement for the similar triangles in the figure. Explain why the triangles are similar. Then, show how to find x, the distance across the lake.