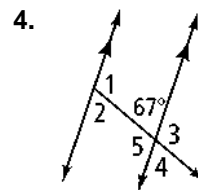
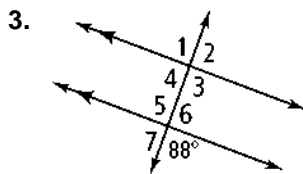
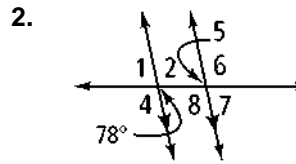
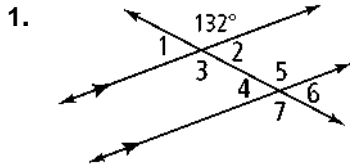


3-2 Practice

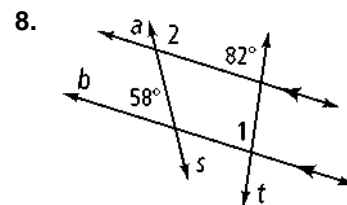
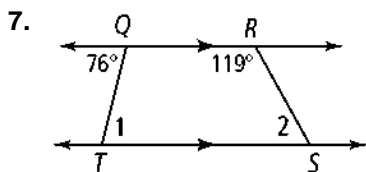
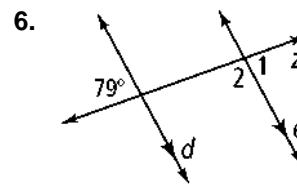
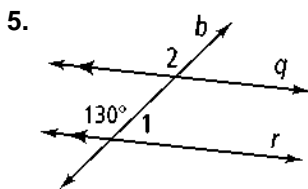
Form G

Properties of Parallel Lines

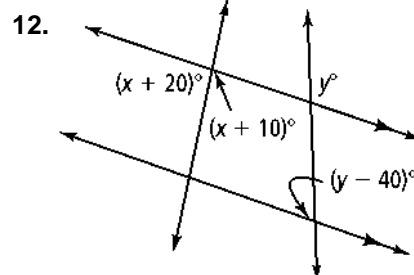
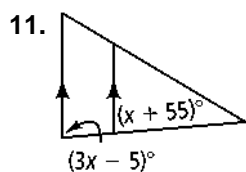
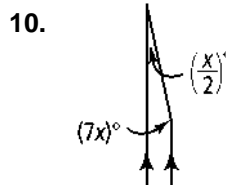
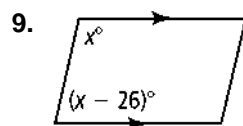
Identify all the numbered angles that are congruent to the given angle. Justify your answers.



Find $m\angle 1$ and $m\angle 2$. Justify each answer.



Algebra Find the value of x and y . Then find the measure of each labeled angle.



3-2 Practice (continued)

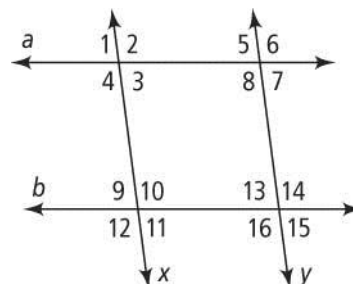
Properties of Parallel Lines

Form G

13. Write a two-column proof.

Given: $a \parallel b, x \parallel y$

Prove: $\angle 4$ is supplementary to $\angle 15$.



Statements	Reasons

14. **Visualization** One pair of parallel lines intersect a second pair of parallel lines. One of the angles of intersection has a measure of 60. How can you determine the measure of the four interior angles? Draw a sketch to support your answer.

15. **Error Analysis** Which solution for the figure at the right is incorrect?

$$2x - 40 = x + 10$$

$$x - 40 = 10$$

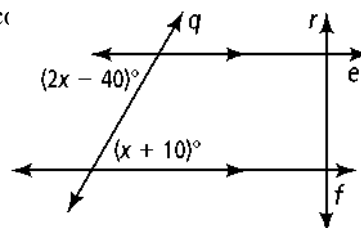
$$x = 50$$

$$2x - 40 + (x + 10) = 180$$

$$3x - 30 = 180$$

$$3x = 210$$

$$x = 70$$



16. A zip line consists of a pulley attached to a cable that is strung at an angle between two objects. In the zip line at the right, one end of the cable is attached to a tree. The other end is attached to a post parallel to the tree. What is the measure of $\angle 1$? What type of angle pair do $\angle 1$ and the given angle represent?

