

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

### Finding Missing Angle Measures with Parallel Lines

1. Name one pair of parallel line segments.

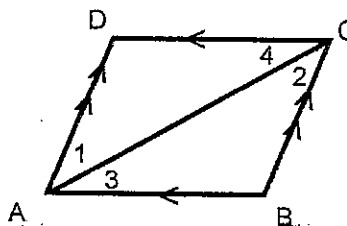
\_\_\_\_\_ and \_\_\_\_\_

2. Name a different pair of parallel line segments

\_\_\_\_\_ and \_\_\_\_\_

3. Name the transversal.

\_\_\_\_\_



→ and  $m\angle DCB = 85^\circ$

Find the missing angle measures if  $m\angle 4 = 45^\circ$ . State the *reason* why you know.

4.  $m\angle 1 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

5.  $m\angle 2 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

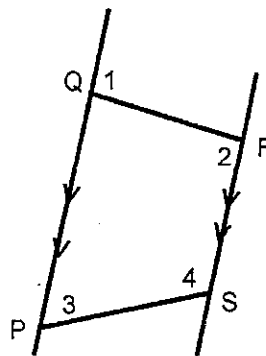
6.  $m\angle 3 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

7. Name one pair of parallel line segments.

\_\_\_\_\_ and \_\_\_\_\_

8. Using line segment QR as a transversal,  
what is the special name for  $\angle 1$  and  $\angle 2$ ?

9. Using line segment PS as a transversal,  
what is the special name for  $\angle 3$  and  $\angle 4$ ?



Find the missing angle measures if  $m\angle 3 = 65^\circ$  and  $m\angle 2 = 95^\circ$ . State the *reason* why you know.

10.  $m\angle 1 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

11.  $m\angle 4 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

12.  $m\angle RQP =$  \_\_\_\_\_ Reason: \_\_\_\_\_

Find the missing angle measures if  $m\angle 1 = 110^\circ$ . State the *reason* why you know.

13.  $m\angle 2 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

14.  $m\angle 3 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

15.  $m\angle 4 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

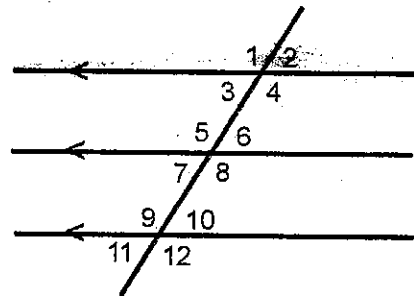
16.  $m\angle 5 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

17.  $m\angle 6 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

18.  $m\angle 7 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

19.  $m\angle 8 =$  \_\_\_\_\_ Reason: \_\_\_\_\_

20.  $m\angle 9 =$  \_\_\_\_\_ Reason: \_\_\_\_\_



Find the measure of each of the following angles:

21.  $m\angle EOC =$  \_\_\_\_\_ Reason: \_\_\_\_\_

22.  $m\angle DOC =$  \_\_\_\_\_ Reason: \_\_\_\_\_

23.  $m\angle BOC =$  \_\_\_\_\_ Reason: \_\_\_\_\_

24.  $m\angle AOB =$  \_\_\_\_\_ Reason: \_\_\_\_\_

