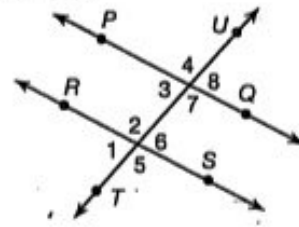


In the figure shown at right,  $\overleftrightarrow{PQ} \parallel \overleftrightarrow{RS}$ . Use the figure for Exercises 1-7.

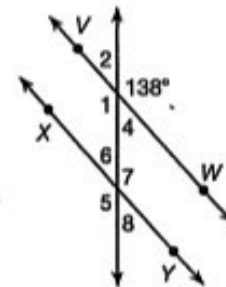


1. Name all interior angles. \_\_\_\_\_
2. Name all exterior angles. \_\_\_\_\_
3. Name the transversal. \_\_\_\_\_
4. Name two pairs of alternate interior angles. \_\_\_\_\_
5. Name two pairs of alternate exterior angles. \_\_\_\_\_
6. Name four pairs of corresponding angles.  
\_\_\_\_\_

7. If  $m\angle 6 = 75^\circ$ , find each angle measure.

$m\angle 1 = \underline{\hspace{2cm}}$       $m\angle 2 = \underline{\hspace{2cm}}$       $m\angle 3 = \underline{\hspace{2cm}}$       $m\angle 4 = \underline{\hspace{2cm}}$   
 $m\angle 5 = \underline{\hspace{2cm}}$       $m\angle 7 = \underline{\hspace{2cm}}$       $m\angle 8 = \underline{\hspace{2cm}}$

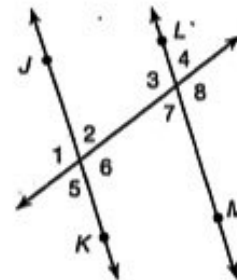
In the figure on the right,  $\overleftrightarrow{VW} \parallel \overleftrightarrow{XY}$ . Use the figure to find the measure of each angle.



8.  $m\angle 1 = \underline{\hspace{2cm}}$      9.  $m\angle 2 = \underline{\hspace{2cm}}$
10.  $m\angle 4 = \underline{\hspace{2cm}}$      11.  $m\angle 5 = \underline{\hspace{2cm}}$
12.  $m\angle 7 = \underline{\hspace{2cm}}$      13.  $m\angle 8 = \underline{\hspace{2cm}}$

Use figure at right to answer Exercises 9-16.

$\overleftrightarrow{JK} \parallel \overleftrightarrow{LM}$ . If  $m\angle 2 = 70^\circ$ , find each angle measure.



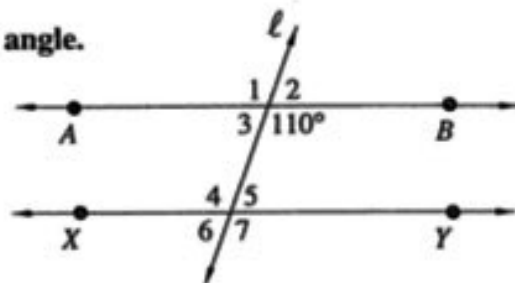
9.  $m\angle 4 = \underline{\hspace{2cm}}$      10.  $m\angle 7 = \underline{\hspace{2cm}}$
11.  $m\angle 5 = \underline{\hspace{2cm}}$      12.  $m\angle 3 = \underline{\hspace{2cm}}$

Match each pair of angles with the angle classification.

- |                                     |                              |
|-------------------------------------|------------------------------|
| 13. $\angle 6$ and $\angle 8$ _____ | A. alternate interior angles |
| 14. $\angle 3$ and $\angle 6$ _____ | B. alternate exterior angles |
| 15. $\angle 4$ and $\angle 7$ _____ | C. corresponding angles      |
| 16. $\angle 1$ and $\angle 8$ _____ | D. vertical angles           |

In the figure at the right,  $\overleftrightarrow{AB} \parallel \overleftrightarrow{XY}$ . Find the measure of each angle.

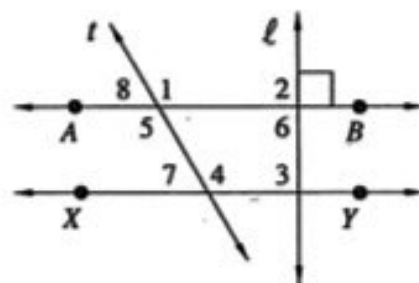
- |               |               |
|---------------|---------------|
| 1. $\angle 1$ | 2. $\angle 2$ |
| 3. $\angle 3$ | 4. $\angle 4$ |
| 5. $\angle 5$ | 6. $\angle 6$ |



7. Lines  $\overleftrightarrow{MN}$  and  $\overleftrightarrow{AB}$  intersect at  $Q$ . Also,  $\overleftrightarrow{MN} \perp \overleftrightarrow{AB}$ . Find the measures of  $\angle MQA$ ,  $\angle NQA$ ,  $\angle MQB$ , and  $\angle NQB$ .

In the figure at the right,  $\overleftrightarrow{AB} \parallel \overleftrightarrow{XY}$ , and  $m\angle 1 = 120^\circ$ . Tell whether each statement is true or false.

- |                             |                                      |
|-----------------------------|--------------------------------------|
| 8. $m\angle 2 = 90^\circ$   | 9. $\overleftrightarrow{XY} \perp l$ |
| 10. $m\angle 3 = 60^\circ$  | 11. $m\angle 4 = 120^\circ$          |
| 12. $m\angle 5 = 120^\circ$ | 13. $m\angle 8 = 120^\circ$          |
| 14. $l \parallel t$         | 15. $m\angle 7 = 60^\circ$           |
| 16. $l \perp t$             | 17. $m\angle 6 = 120^\circ$          |



In the figure at the right,  $\overleftrightarrow{MN} \parallel \overleftrightarrow{PQ}$  and the measure of  $\angle 6$  is  $85^\circ$ . Find the measure of each angle.

- |                |                |                |
|----------------|----------------|----------------|
| 18. $\angle 7$ | 19. $\angle 3$ | 20. $\angle 2$ |
| 21. $\angle 8$ | 22. $\angle 5$ | 23. $\angle 4$ |

