

### Chapter 3.1 Worksheet

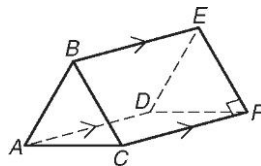
- The Corresponding Angles Postulate states that if two parallel lines are cut by a transversal, then the pairs of corresponding angles are \_\_\_\_\_.
- Congruent angles have \_\_\_\_\_ measures.

**Fill in the blanks to complete these theorems about angle pairs.**

- If two \_\_\_\_\_ lines are cut by a \_\_\_\_\_, then the two pairs of alternate interior angles are congruent.
- If two parallel lines are cut by a transversal, then the two pairs of same-side interior angles are \_\_\_\_\_.
- If two parallel lines are cut by a transversal, then the two pairs of alternate exterior angles are \_\_\_\_\_.

**For Exercises 6-9, identify each of the following in the figure.**

- a pair of parallel segments
- a pair of skew segments
- a pair of perpendicular segments
- a pair of parallel planes



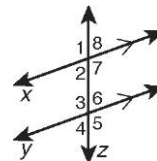
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

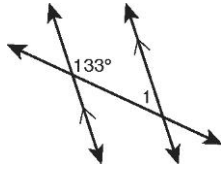
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**In Exercises 10-15, give one example of each from the figure.**

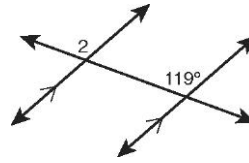


- |                               |                               |                               |
|-------------------------------|-------------------------------|-------------------------------|
| 10. a transversal             | 11. parallel lines            | 12. corresponding angles      |
| _____                         | _____                         | _____                         |
| 13. alternate interior angles | 14. alternate exterior angles | 15. same-side interior angles |
| _____                         | _____                         | _____                         |

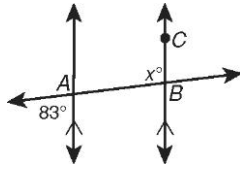
Find each angle measure.



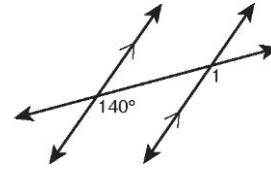
16.  $m\angle 1$  \_\_\_\_\_



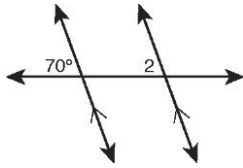
17.  $m\angle 2$  \_\_\_\_\_



18.  $m\angle ABC$  \_\_\_\_\_

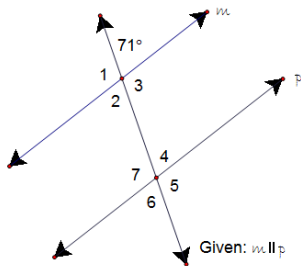


19.  $m\angle 1$  \_\_\_\_\_

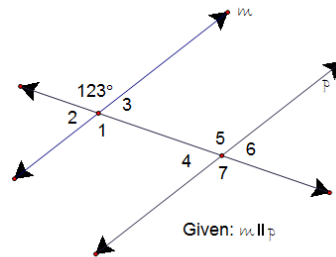


20.  $m\angle 2$  \_\_\_\_\_

Find the measures of all angles in the diagrams.



21.



22.