

Name: _____

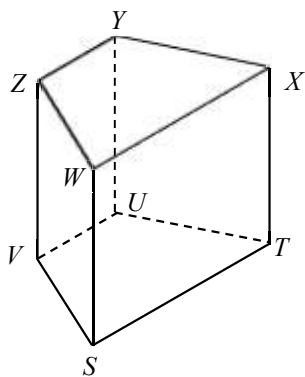
Unit 3: Parallel & Perpendicular Lines

Date: _____ Per: _____

Homework 1: Parallel Lines & Transversals

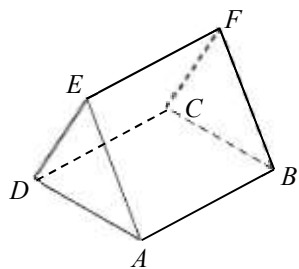
**** This is a 2-page document! ****

1. Use the diagram below to answer the following questions.



- Name all segments parallel to $\overline{XT}$. _____
- Name all segments parallel to $\overline{ZY}$. _____
- Name all segments parallel to $\overline{VS}$. _____
- Name a plane parallel to plane STU . _____
- Name a plane parallel to plane UVZ . _____
- Name all segments skew to $\overline{SW}$. _____
- Name all segments skew to $\overline{UT}$. _____

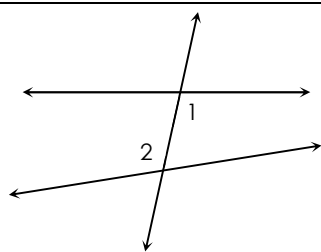
2. Using the diagram below, describe the relationship as parallel, intersecting, or skew.



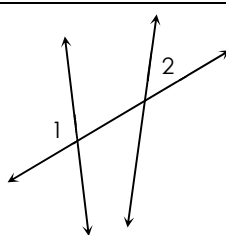
- $\overline{AB}$ and $\overline{BC}$ _____
- $\overline{AE}$ and $\overline{BF}$ _____
- $\overline{EF}$ and $\overline{AD}$ _____
- Plane ABC and plane ABF _____
- Plane AED and plane BFC _____

Classify $\angle 1$ and $\angle 2$ on the diagram as corresponding, alternate interior, alternate exterior, consecutive (same-side) interior, or consecutive (same-side) exterior angles.

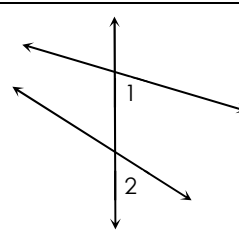
3.



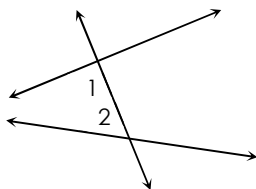
4.



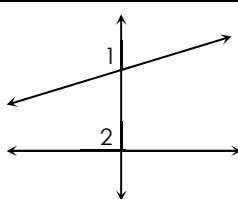
5.



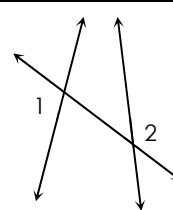
6.



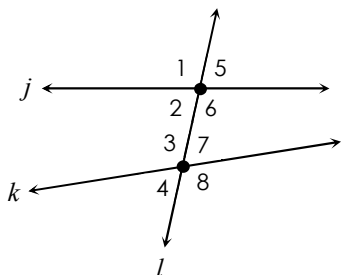
7.



8.



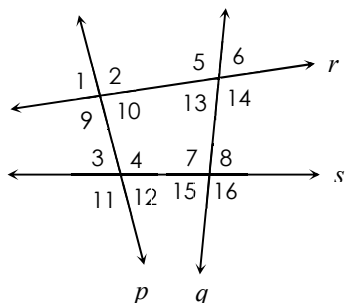
9. Use the diagram below to answer the following questions.



- Name a transversal. _____
- Name all corresponding angles. _____

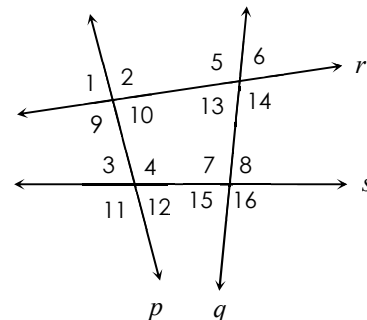
- Name all alternate interior angles. _____
- Name all alternate exterior angles. _____
- Name all consecutive interior angles. _____
- Name all consecutive exterior angles. _____

10. Use the diagram below to answer the following questions.



- Name the transversal connecting $\angle 1$ and $\angle 5$. _____
- Name the transversal connecting $\angle 7$ and $\angle 14$. _____
- Name the transversal connecting $\angle 8$ and $\angle 11$. _____
- Name the transversal connecting $\angle 6$ and $\angle 15$. _____
- Name the transversal connecting $\angle 3$ and $\angle 9$. _____

11. Using the diagram below, classify the angle pairs as corresponding, alternate interior, alternate exterior, consecutive interior, consecutive exterior, or none.



a. $\angle 4$ and $\angle 7$	b. $\angle 2$ and $\angle 11$
c. $\angle 6$ and $\angle 16$	d. $\angle 8$ and $\angle 13$
e. $\angle 11$ and $\angle 15$	f. $\angle 7$ and $\angle 10$
g. $\angle 9$ and $\angle 14$	h. $\angle 12$ and $\angle 15$
i. $\angle 6$ and $\angle 7$	j. $\angle 1$ and $\angle 3$
k. $\angle 14$ and $\angle 16$	l. $\angle 6$ and $\angle 15$
m. $\angle 5$ and $\angle 10$	n. $\angle 8$ and $\angle 14$