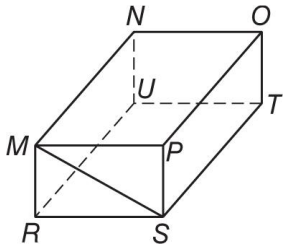
NAME _____ DATE _____ PERIOD _____

3-1 Study Guide and Intervention

Parallel Lines and Transversals

Exercises

Refer to the figure at the right to identify each of the following.

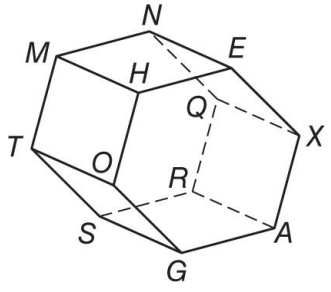


1. all planes that intersect plane *OPT*

2. all segments parallel to $\overline{NU}$

3. all segments that intersect $\overline{MP}$

Refer to the figure at the right to identify each of the following.



4. all segments parallel to $\overline{QX}$

5. all planes that intersect plane *MHE*

6. all segments parallel to $\overline{QR}$

7. all segments skew to $\overline{AG}$

Exercises

Classify the relationship between each pair of angles as *alternate interior*, *alternate exterior*, *corresponding*, or *consecutive interior* angles.

8. ∠1 and ∠5

9. ∠6 and ∠14

10. ∠2 and ∠8

11. ∠3 and ∠11

12. ∠12 and ∠3

13. ∠4 and ∠6

14. ∠6 and ∠16

15. ∠11 and ∠14

16. ∠10 and ∠16

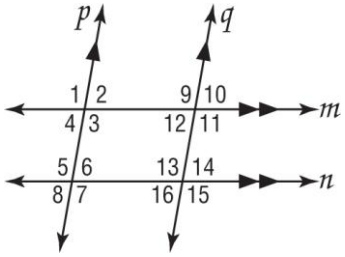
NAME _____ DATE _____ PERIOD _____

3-2 Study Guide and Intervention

Angles and Parallel Lines

Exercises

In the figure, $m\angle 3 = 102$. Find the measure of each angle. Tell which postulate(s) or theorem(s) you used.



1. $\angle 5$

2. $\angle 6$

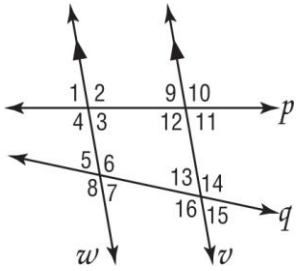
3. $\angle 11$

4. $\angle 7$

5. $\angle 15$

6. $\angle 14$

In the figure, $m\angle 9 = 80$ and $m\angle 5 = 68$. Find the measure of each angle. Tell which postulate(s) or theorem(s) you used.



7. $\angle 12$

8. $\angle 1$

9. $\angle 4$

10. $\angle 3$

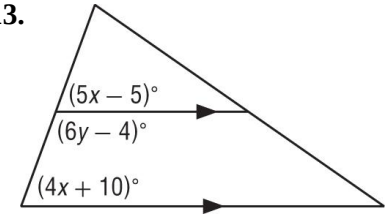
11. $\angle 7$

12. $\angle 16$

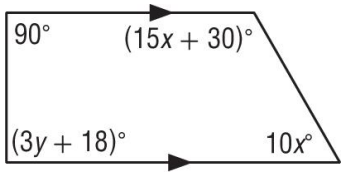
Exercises

Find the value of the variable(s) in each figure. Explain your reasoning.

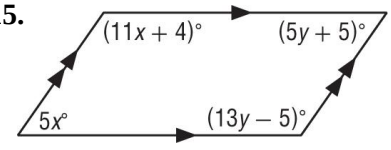
13.



14.



15.



16.