



**Geometry**  
**Unit 2—vocabulary**  
**Assessment**

**Name:** \_\_\_\_\_

**Period:** \_\_\_\_\_

**1-4**  
**EXERCISES**

**Chapter 1**  
**Foundations for Geometry**

Homework Help Online

Online Support for Lesson 1-4 Homework

**GUIDED PRACTICE**

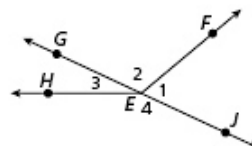
Click a video icon to see a Lesson Tutorial Video.



**See Example 1**

Tell whether the angles are only adjacent, adjacent and form a linear pair, or not adjacent.

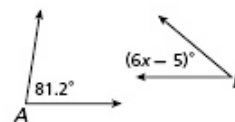
3.  $\angle 1$  and  $\angle 2$       4.  $\angle 1$  and  $\angle 3$   
 5.  $\angle 2$  and  $\angle 4$       6.  $\angle 2$  and  $\angle 3$



**See Example 2**

Find the measure of each of the following.

7. supplement of  $\angle A$       8. complement of  $\angle A$   
 9. supplement of  $\angle B$       10. complement of  $\angle B$



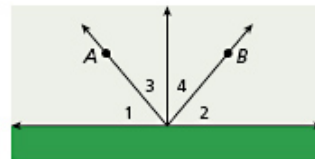
**See Example 3**

11. **Multi-Step** An angle's measure is 6 degrees more than 3 times the measure of its complement. Find the measure of the angle.



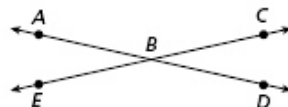
**See Example 4**

12. **Landscaping** A sprinkler swings back and forth between  $A$  and  $B$  in such a way that  $\angle 1 \cong \angle 2$ .  $\angle 1$  and  $\angle 3$  are complementary, and  $\angle 2$  and  $\angle 4$  are complementary. If  $m\angle 1 = 18.5^\circ$ , find  $m\angle 2$ ,  $m\angle 3$ , and  $m\angle 4$ .



**See Example 5**

13. Name each pair of vertical angles.





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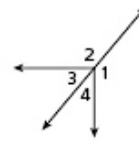
Click a video icon to see a Lesson Tutorial Video. Click a lightbulb icon to see a complete solution.



VIDEO

Tell whether the angles are only adjacent, adjacent and form a linear pair, or not adjacent.

14.  $\angle 1$  and  $\angle 4$       15.  $\angle 2$  and  $\angle 3$   
16.  $\angle 3$  and  $\angle 4$       17.  $\angle 3$  and  $\angle 1$



VIDEO

Given  $m\angle A = 56.4^\circ$  and  $m\angle B = (2x - 4)^\circ$ , find the measure of each of the following.

18. supplement of  $\angle A$       19. complement of  $\angle A$   
20. supplement of  $\angle B$       21. complement of  $\angle B$



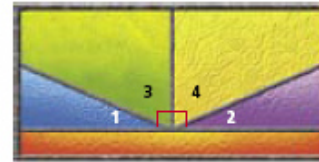
VIDEO

22. **Multi-Step** An angle's measure is 3 times the measure of its complement. Find the measure of the angle and the measure of its complement.



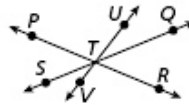
VIDEO

23. **Art** In the stained glass pattern,  $\angle 1 \cong \angle 2$ .  $\angle 1$  and  $\angle 3$  are complementary, and  $\angle 2$  and  $\angle 4$  are complementary. If  $m\angle 1 = 22.3^\circ$ , find  $m\angle 2$ ,  $m\angle 3$ , and  $m\angle 4$ .



VIDEO

24. Name the pairs of vertical angles.



SOLUTION

25. **Probability** The angle measures  $30^\circ$ ,  $60^\circ$ ,  $120^\circ$ , and  $150^\circ$  are written on slips of paper. You choose two slips of paper at random. What is the probability that the angle measures are supplementary?



SOLUTION

**Multi-Step**  $\angle ABD$  and  $\angle BDE$  are supplementary. Find the measures of both angles.

27.  $m\angle ABD = (3x + 12)^\circ$ ,  $m\angle BDE = (7x - 32)^\circ$



SOLUTION

**Multi-Step**  $\angle ABD$  and  $\angle BDC$  are complementary. Find the measures of both angles.

29.  $m\angle ABD = (5y + 1)^\circ$ ,  $m\angle BDC = (3y - 7)^\circ$