LESSON 2.6

NAME _____ DATE _____

Practice C

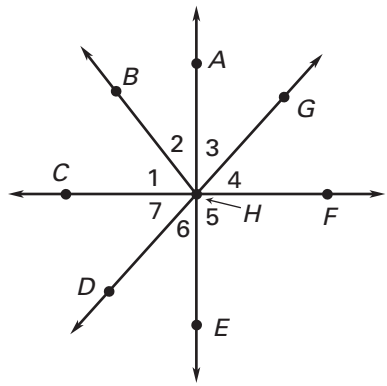
For use with pages 109–116

Make a sketch of the given information. Label all angles which can be determined.

1. Vertical angles which measure 115°
2. A linear pair where one angle measures 115°
3. Congruent complementary angles
4. Supplementary angles where one angle measures 115°

In Exercises 5–10, complete the statement given that $m\angle BHD = m\angle CHE = m\angle EHF = 90°$.

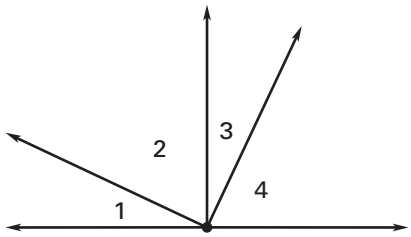
5. If $m\angle 3 = 42°$, then $m\angle 6 =$ ___?___.
6. If $m\angle BHE = 142°$, then $m\angle 1 =$ ___?___.
7. If $m\angle 1 = 37°$, then $m\angle 6 =$ ___?___.
8. If $m\angle EHG = 132°$, then $\angle 7 =$ ___?___.
9. If $m\angle 7 = 51°$, then $m\angle 3 =$ ___?___.
10. If $m\angle EHB = 153°$, then $m\angle 2 =$ ___?___.



11. Complete the proof.

Given: $\angle 1$ and $\angle 2$ are complementary. $\angle 1 \cong \angle 3$, $\angle 2 \cong \angle 4$

Prove: $\angle 3$ and $\angle 4$ are complementary.

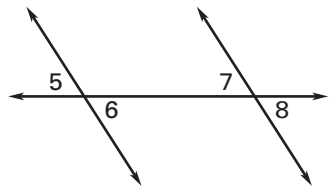


Statements	Reasons
1. ___?___	1. Given
2. $m\angle 1 + m\angle 2 = 90°$	2. ___?___
3. $\angle 1 \cong \angle 3$, $\angle 2 \cong \angle 4$	3. ___?___
4. ___?___	4. Defintion of congruent angles
5. $m\angle 3 + m\angle 2 = 90°$	5. ___?___
6. $m\angle 3 + m\angle 4 = 90°$	6. ___?___
7. ___?___	7. Definition of complementary angles

12. Write a two-column proof.

Given: $m\angle 6 = m\angle 7$

Prove: $\angle 5 \cong \angle 8$



13. Write an argument for Exercise 12 in the form of a paragraph proof.