Practice A

For use with pages 136–141

State the reason for the conclusion.

1. Given: $\angle 1 \cong \angle 2$ Conclusion: $m \angle 1 = m \angle 2$

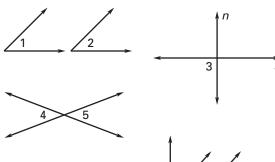
2. Given: $\ell \perp n$

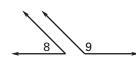
Conclusion: $\angle 3$ is a right angle

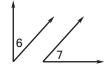
3. Given: $\angle 4$ and $\angle 5$ are vertical angles Conclusion: $\angle 4 \cong \angle 5$

4. Given: $\angle 6$ and $\angle 7$ are complementary angles Conclusion: $m\angle 6 + m\angle 7 = 90^{\circ}$

5. Given: $\angle 8$ and $\angle 9$ are supplementary angles Conclusion: $m\angle 8 + m\angle 9 = 180^{\circ}$

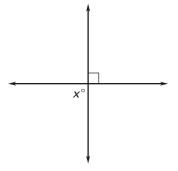




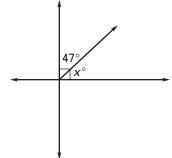


Find the value of x.

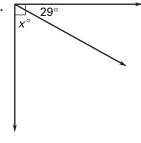
6.



7.



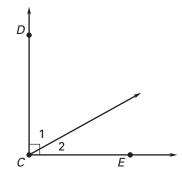
2



9. Complete the flow proof of Theorem 3.2.

Given: $\overrightarrow{CD} \perp \overrightarrow{CE}$

Prove: $\angle 1$ and $\angle 2$ are complementary.



 $m \angle DCE = m \angle 1 + m \angle 2$

d. _____

 $\overrightarrow{CD} \perp \overrightarrow{CE}$

 $\boxed{m \angle 1 + m \angle 2 = 90^{\circ}}$

f. _____

complementary.