$\qquad$ Date $\qquad$

## Practice A

## 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 $\boldsymbol{x}$.

6. 


7.

8.


$$
\overrightarrow{C D} \perp \overrightarrow{C E}
$$

Given: $\overrightarrow{C D} \perp \overrightarrow{C E}$
Prove: $\angle 1$ and $\angle 2$ are complementary.


$$
m \angle D C E=m \angle 1+m \angle 2
$$

d.


b.

c. $\qquad$

e.

$\angle 1$ and $\angle 2$ are complementary.
f. $\qquad$

