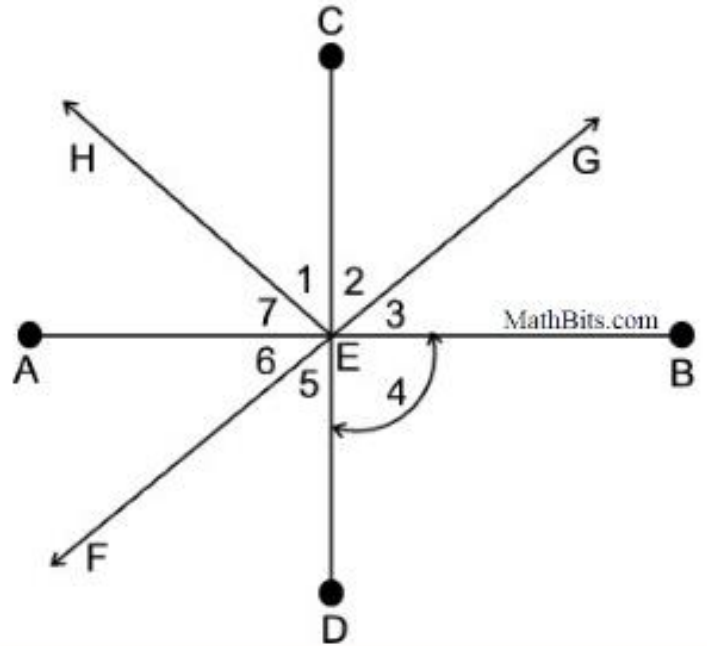


Use the diagram for all questions and your axioms page to help you find the reasons. Each problem is independent of any previous given information.



1. Given: $\overline{CD} \perp \overline{AB}$
Conclusion: $\angle CEB$ right \angle
Reason: _____

2. Given: $m\angle 2 + m\angle 3 = 90$
Conclusion: $\angle 2$ and $\angle 3$ complementary
Reason: _____

3. Given: E is midpoint of \overline{AB}
Conclusion: _____
Reason: _____

4. Given: $\angle 2 \cong \angle 3$
Conclusion: \overline{EG} bisects $\angle CEB$
Reason: _____

6. Given: \overline{EH} bisects $\angle AEC$
Conclusion: _____
Reason: _____

8. Given: linear pair $\angle AEG$ and $\angle GEB$
Conclusion: _____
Reason: _____

10. Given: $m\angle 5 = m\angle 6$
Conclusion: $\angle 5 \cong \angle 6$
Reason: _____

5. Given: $\angle AEG$ and $\angle 5$ supplementary
Conclusion: _____
Reason: _____

7. Given: $\angle 3$ and $\angle 6$ vertical \angle s
Conclusion: _____
Reason: _____

9. Given: diagram
Conclusion: $m\angle 4 + m\angle 3 = m\angle DEG$
Reason: _____

11. Given: $\angle 4$ right \angle
Conclusion: _____
Reason: _____

12. Given: Diagram

Conclusion:

$$m\angle 7 + m\angle 1 + m\angle 2 + m\angle 3 = 180^\circ$$

13. Given: Diagram

Conclusion:

$$m\angle 1 + m\angle 2 + m\angle 3 + m\angle 4 = 360^\circ$$

$$+ m\angle 5 + m\angle 6 + m\angle 7$$

14. Given: $\angle 3 \cong \angle 5$ and $\angle 4 \cong \angle 4$

Conclusion: $\angle GED \cong \angle FEB$

15. Given: $\angle HEF \cong \angle DEA$ and $\angle 6 \cong \angle 6$

Conclusion: $\angle 7 \cong \angle 5$

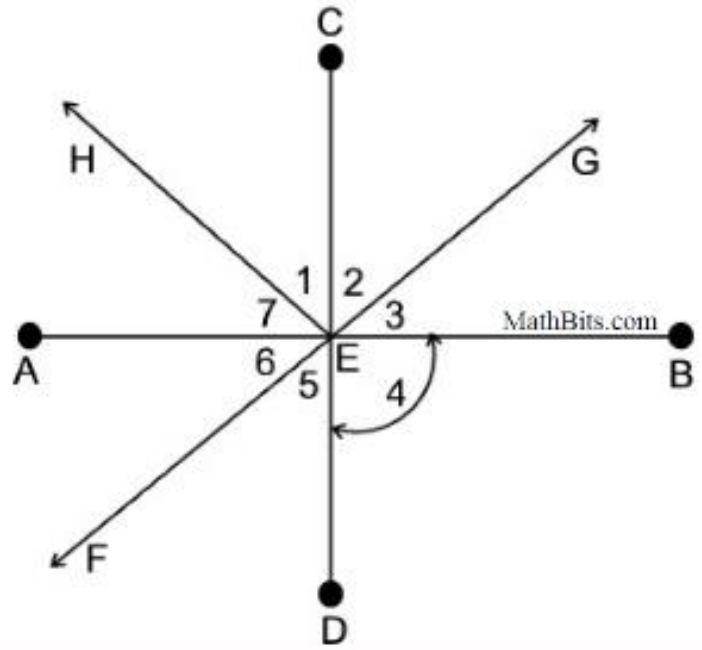
16. Given: $\angle BED$ & $\angle HEF$ are right angles

Conclusion: $\angle BED \cong \angle HEF$

17. Given: $\angle 1$ complementary to $\angle 7$

$\angle 6$ complementary to $\angle 7$

Conclusion: $\angle 1 \cong \angle 6$



$\angle 1$ complementary to $\angle 7$

18. Given: $\angle 2$ complementary to $\angle 3$

$\angle 3 \cong \angle 7$

Conclusion: $\angle 1 \cong \angle 2$

19. If $\angle CEA$ and $\angle CEB$ are bisected by \overrightarrow{EH} & \overrightarrow{EG} , respectively, then $\angle 7 \cong \angle 1$ and $\angle 2 \cong \angle 3$

because _____.

If $\angle CEA \cong \angle CEB$ as well, then $\angle 7 \cong \angle 1 \cong \angle 2 \cong \angle 3$ because _____.

_____.