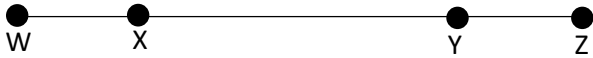


WS4: Lesson 2.7

Name _____ Per. ____

2. Complete the proof.

Given: $\overline{WX} \cong \overline{YZ}$

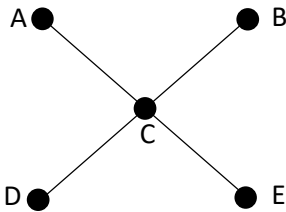


Prove: $\overline{WY} \cong \overline{XZ}$

Statements	Reasons
1.	
2. $WX = YZ$	
3. $XY = XY$	Reflexive Property of Equality
4. $WX + XY = YZ + XY$	
5.	Segment Addition Postulate
6.	Substitution
7.	Definition of Congruent Segments

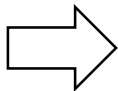
4. Complete the proof.

Given: C is the midpoint of $\overline{AE}$
C is the midpoint of $\overline{BD}$
 $\overline{AE} \cong \overline{BD}$



Prove: $\overline{AC} \cong \overline{CD}$

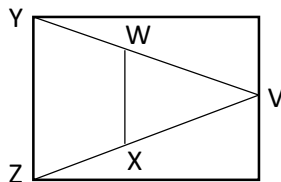
Statements	Reasons
1.	Given
2. $AC = CE, BC = CD$	
3. $AE = BD$	
4.	Segment Addition Postulate
5. $AC + CE = BC + CD$	
6. $AC + AC = CD + CD$	
7.	Substitution
8.	Division Property of Equality
9. $\overline{AC} \cong \overline{CD}$	



10. Complete the proof

Given: $\overline{VZ} \cong \overline{VY}$ and $\overline{WY} \cong \overline{XZ}$

Prove: $\overline{VW} \cong \overline{VX}$



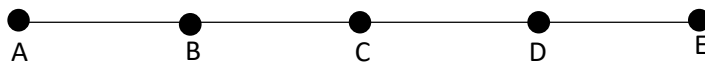
Statements	Reasons
1.	
2. $VZ = VY$ and $WY = XZ$	
3.	Segment Addition Postulate
4. $VX + XZ = VW + WY$	Substitution
5.	Substitution
6. $VX = VW$	Subtraction Property of Equality
7.	Symmetric Property of Equality
8.	

12. Complete the proof

Given: B is the midpoint of $\overline{AC}$

D is the midpoint of $\overline{CE}$

$\overline{AB} \cong \overline{DE}$



Prove: $AE = 4AB$

Statements	Reasons
1.	
2. and	Definition of a midpoint
3. $AB = DE$	
4. $AB = CD$	
5.	Segment Addition Postulate
6. $AE = AC + CE$	
7. $AE = AB + BC + CD + DE$	Substitution
8.	Substitution
9.	

17. Turn to page 147 of your textbook to answer this question. Record your answer below.