

Notes Proofs with Segments

Name: _____ Date: _____ Period: _____

Learning Target: _____

	Algebraic Properties of Equality	Geometric Properties of Congruence	
	Real Numbers	Segments	Angles
Reflexive			
Symmetric			
Transitive			

Example 1: Given: F is between E and G

Prove: $EG = EF + FG$



Statements

Reasons

Example 2: Given: F is between E and G

Prove: $EF = EG - FG$



Statements

Reasons

Example 3: Given: $\overline{EG} \cong \overline{FH}$

Prove: $EG = FH$



Statements

Reasons

Example 4: Given: $\overline{EG} \cong \overline{FH}$

Prove: $\overline{EF} \cong \overline{GH}$



Statements

Reasons

Example 5: Given: $\overline{EF} \cong \overline{GH}$

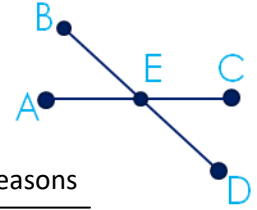
Prove: $\overline{EG} \cong \overline{FH}$



Statements	Reasons

Example 6: $\overline{AC} \cong \overline{BD}$, $\overline{EC} \cong \overline{ED}$

Prove: $\overline{BE} \cong \overline{AE}$



Statements	Reasons

Example 7: Given: G is the midpoint of \overline{EH}

Prove: $2EG = EH$



Statements	Reasons

Example 8: Given: F is the midpoint of \overline{EH} , G is the midpoint of \overline{FH}

Prove: $4FG = EH$



Statements	Reasons