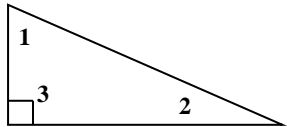


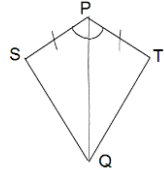
**Challenge Test
Geometry XL**

Name: _____

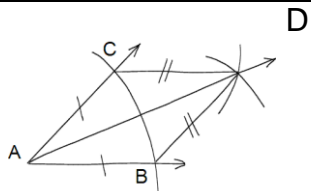
Proof #1

Given: a triangle with $m\angle 3 = 90^\circ$ Prove: $\angle 1$ and $\angle 2$ are complementary	
Statements	Reasons
1. $m\angle 3 = 90^\circ$	1. Given

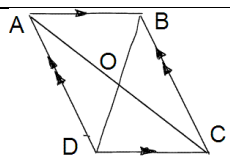
Proof #2

Given: PQ bisects $\angle SPT$, $SP \cong PT$ Prove: $\triangle SPQ \cong \triangle TPQ$	
Statements	Reasons
1. PQ bisects $\angle SPT$, $SP \cong PT$	1. Given

Proof #3

	Given: $AB \cong AC$, $BD \cong CD$ Prove: AD bisects $\angle CAB$
Statements	Reasons
1. $AB \cong AC$, $BD \cong CD$	1. Given

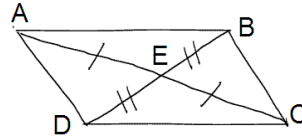
Proof #4

Given: p'gram ABCD w/ diagonals AC & BD Prove: $AO \cong OC$ and $DO \cong OB$	
Statements	Reasons
1. p'gram ABCD w/ diagonals AC & BD	1. Given

Proof #5

Given: $AE \cong EC$, $DE \cong EB$

Prove: ABCD is a p'gram

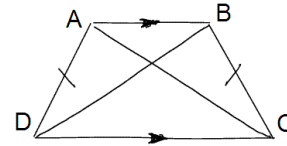


Statements	Reasons
1. $AE \cong EC$, $DE \cong EB$	1. Given
ABCD is a p'gram	Defn of a p'gram

Proof #6

Given: trapezoid ABCD
 $AD \cong BC$

Prove: $AC \cong BD$

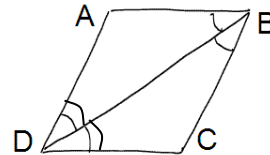


Statements	Reasons

Proof #7

Given: p'gram ABCD
 $\angle CBD \cong \angle ABD$, $\angle BDC \cong \angle BDA$

Prove: ABCD is a rhombus



Statements	Reasons