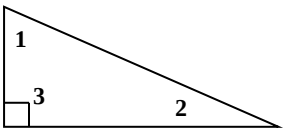
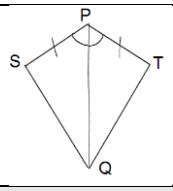
Challenge Test Review Proofs **Name:** _____
Algebra 2 Honors

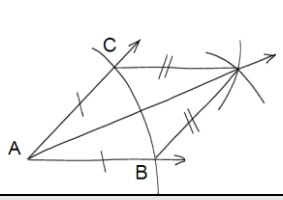
Proof #1

Given: a triangle with m∠3 = 90° Prove: ∠1 and ∠2 are complementary	
Statements	**Reasons**
1. m∠3 = 90°	1. Given

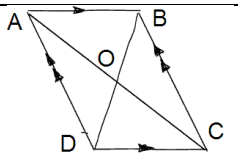
Proof #2

Given: PQ bisects ∠SPT, SP ≅ PT Prove: ΔSPQ ≅ ΔTPQ	
Statements	**Reasons**
1. PQ bisects ∠SPT, SP ≅ PT	1. Given

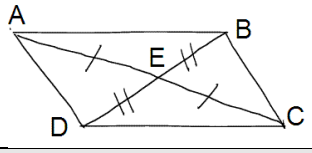
Proof #3

	Given: AB ≅ AC, BD ≅ CD Prove: AD bisects ∠CAB
Statements	**Reasons**
1. AB ≅ AC, BD ≅ CD	1. Given

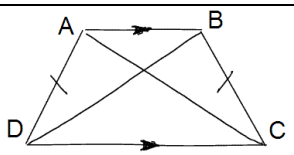
Proof #4

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

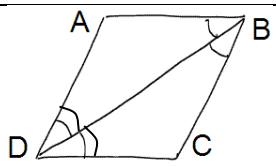
Proof #5

Given: AE ≅ EC, DE ≅ EB Prove: ABCD is a p'gram	
Statements	Reasons
1. AE ≅ EC, DE ≅ EB	1. Given
ABCD is a p'gram	Defn of a p'gram

Proof #6

Given: trapezoid ABCD AD ≅ BC Prove: AC ≅ BD	
Statements	Reasons

Proof #7

Given: p'gram ABCD ∠CBD ≅ ∠ABD, ∠BDC ≅ ∠BDA Prove: ABCD is a rhombus	
Statements	Reasons