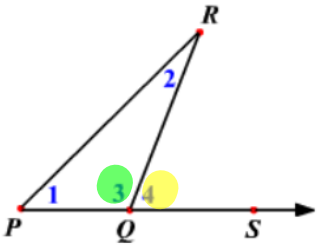
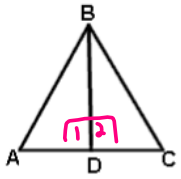
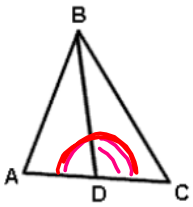
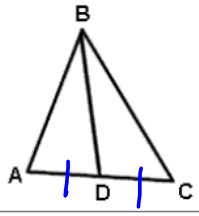
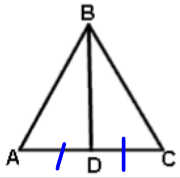
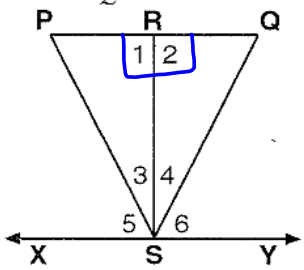
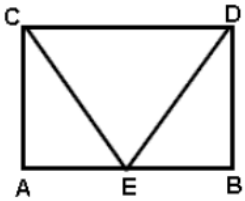
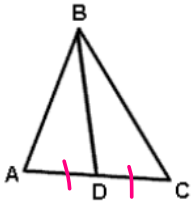
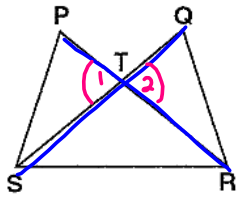
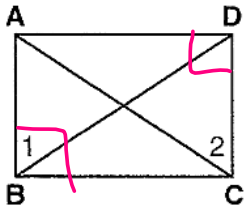
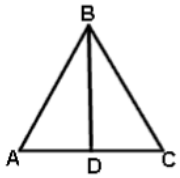
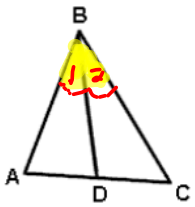
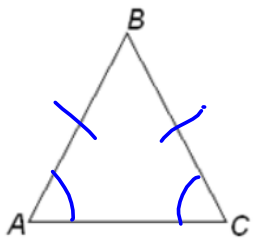
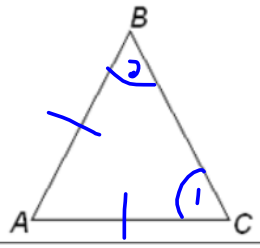
Name: _____ Date: _____

Using Vocabulary in Proofs Ditto 2

Given:	Statement	Reason
Given: ∠RQS is an exterior angle of triangle PRQ 	1. ∠RQS is an exterior ∠ of ΔPRQ 2. ∠4 = ∠2 + ∠1	1. Given 2. An exterior ∠ of a Δ is equal to the sum non-adjacent interior ∠s
Given: $\overline{BD}$ is an altitude of triangle ABC 	1. $\overline{BD}$ is an altitude of ΔABC 2. $\overline{BD} \perp \overline{AC}$ 3. ∠1 is right ∠2 is right 4. ∠1 ≅ ∠2	1. Given 2. an altitude of a Δ is drawn from a vertex ⊥ to the opposite side 3. ⊥ lines form rt ∠s 4. rt ∠s are ≅
Given: ∠ADB and ∠CDB 	1. ∠ADB and ∠CDB 2. ∠ADB + ∠CDB = 180	1. Given 2. A straight ∠ measures 180°

	Statement	Reason
Given: $\overline{BD}$ bisects $\overline{AC}$ at D 	1. $\overline{BD}$ bisects $\overline{AC}$ at D 2. $\overline{AD} \cong \overline{DC}$	1. Given 2. A segment bisector divides a line segment into 2 ≅ parts
Given: $\overline{BD}$ is a median of triangle ABC 	1. BD is a median of △ABC 2. D is the midpt of $\overline{AC}$ 3. $\overline{AD} \cong \overline{DC}$	1. Given 2. A median of a △ is drawn from a vertex to the midpt of the opposite side 3. A midpt divides a line segment into 2 ≅ parts
Given: $\overline{RS} \perp \overline{PQ}$ 	1. $\overline{RS} \perp \overline{PQ}$ 2. ∡1 is right ∡2 is right 3. ∡1 ≅ ∡2	1. Given 2. ⊥ lines form right ∡s 3. right ∡s are ≅
Given: ∠ECA and ∠ECD are complementary 	1. ∡ECA and ∡ECD are complementary 2. ∡ECA + ∡ECD = 90	1. Given 2. Complementary ∡s add to 90°

	Statement	Reason
Given: D is the midpoint of $\overline{AC}$ 	1. D is the midpt of $\overline{AC}$	1. Given
	2. $\overline{AD} \cong \overline{DC}$	2. A midpt divides a line segment into 2 ≅ parts
Given: Intersecting lines $\overline{STQ}$ and $\overline{PR}$ 	1. intersecting lines $\overline{STQ}$ and $\overline{PR}$	1. Given
	2. $\angle 1 \cong \angle 2$	2. intersecting lines form ≅ vertical angles
Given: ∠CDA and ∠ABC are right 	1. ∠CDA and ∠ABC are right	1. Given
	2. $\angle CDA \cong \angle ABC$	2. rt ∠s are ≅
Given: ∠ADB and ∠CDB are supplementary 	1. ∠ADB and ∠CDB are supplementary	1. Given
	2. $\angle ADB + \angle CDB = 180$	2. supplementary ∠s add to 180°

	Statement	Reason
Given: $\overline{BD}$ bisects $\angle ABC$ 	1. $\overline{BD}$ bisects $\angle ABC$	1. Given
	2. $\angle 1 \cong \angle 2$	2. An $\angle$ bisector divides an $\angle$ into 2 $\cong$ $\angle$s
Given: $\angle BAC \cong \angle BCA$ 	1. $\angle BAC \cong \angle BCA$	1. Given
	2. $\overline{BC} \cong \overline{AB}$	2. if 2 $\angle$s of a Δ are $\cong$ then the sides opposite them are $\cong$
Given: $\overline{AB} \cong \overline{AC}$ 	1. $\overline{AB} \cong \overline{AC}$	1. Given
	2. $\angle 1 \cong \angle 2$	2. if 2 sides of a Δ are $\cong$ then the $\angle$s opposite them are $\cong$.