Name _____ Date _____

1. Copy and complete the proof.
   Then write a paragraph proof.

   Given ∠1 and ∠2 are supplementary.

   ∠2 ≅ ∠3

   Prove ∠1 and ∠3 are supplementary.
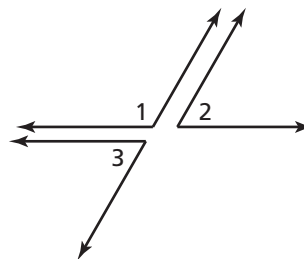
STATEMENTS	REASONS
1. ∠1 and ∠2 are supplementary. ∠2 ≅ ∠3	**1.** Given
2. $m\angle 1 + m\angle 2 = 180°$	**2.** _____
3. $m\angle 2 = m\angle 3$	**3.** Definition of congruent angles
4. _____	**4.** Substitution Property of Equality
5. ∠1 and ∠3 are supplementary.	**5.** Definition of supplementary angles

2. Copy and complete the flowchart proof. Then write a two-column proof.

   Given ∠3 ≅ ∠5

   Prove ∠1 ≅ ∠5
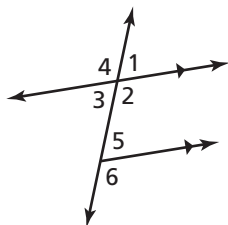
∠3 ≅ ∠5	→	∠3 ≅ ∠1	→	
Given		_____		Translations map lines to parallel lines.

3. Your friend says that there is
   enough information to prove
   that ∠AGB ≅ ∠EGD. Is your
   friend correct? Explain your
   reasoning.