Name: _____   **Unit 6:** Similar Triangles
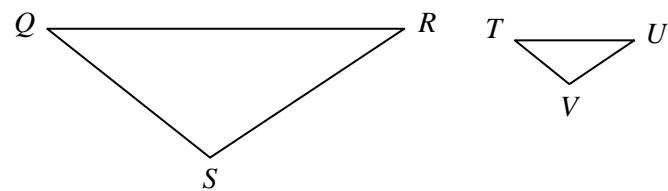
**Date:** _____ **Per:** _____   **Homework 4:** Similar Triangle Proofs
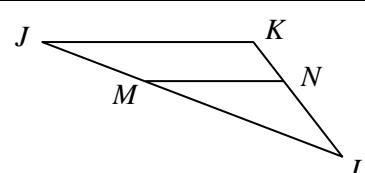
** This is a 2-page document! **

Directions: Complete each proof.

**1. Given:** $\overline{DE} \parallel \overline{GH}$

Prove: $\triangle DFE \sim \triangle GFH$

Statements	Reasons

2. Given: $\dfrac{QS}{TV} = \dfrac{RS}{UV} = 3, QR = 3TU$

Prove: $\triangle QRS \sim \triangle TUV$
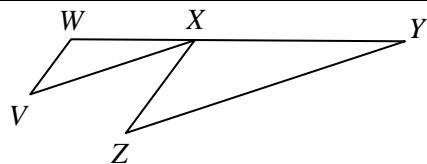
Statements	Reasons

3. Given: $\dfrac{LM}{LJ} = \dfrac{LN}{LK}$

Prove: $\triangle LMN \sim \triangle LJK$

Statements	Reasons

4. Given: $\overline{VW} \parallel \overline{ZX}$, $\dfrac{VW}{ZX} = \dfrac{WX}{XY}$
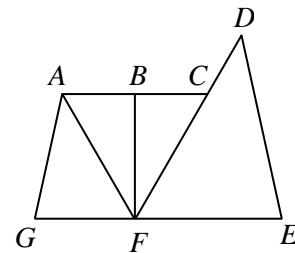
   Prove: $\angle V \cong \angle Z$

Statements	Reasons

5. Given: $\angle BFG \cong \angle BFE$, $\overline{BF}$ bisects $\angle AFD$,
   $\angle GAF \cong \angle EDF$

   Prove: $\triangle GAF \sim \triangle EDF$

Statements	Reasons