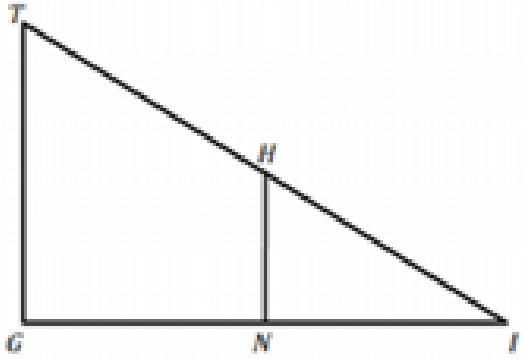
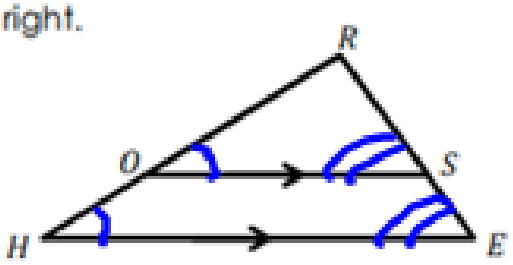
Your turn:

Which of the following could be used to prove that ΔHIN *and* ΔTIG are similar? Select all that apply.



- ☐ N is the midpoint of $\overline{GI}$
- ☑ $\overline{TG} \parallel \overline{HN}$
- ☐ $\angle T \cong \angle I$
- ☐ $\overline{TG} \perp \overline{IG}$
- ☑ $\overline{HN}$ bisects $\overline{IG}$ and $\overline{TI}$
- ☑ ΔTIG is dilated by a scale factor less than 1 centered at point I.

Consider the diagram to the right.



Given: $\overline{OS} \parallel \overline{HE}$

Prove: $\frac{OH}{OR} = \frac{SE}{RS}$

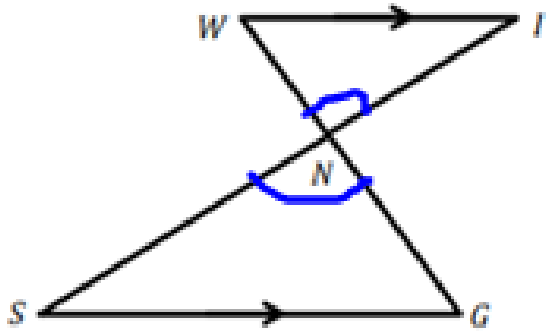
Complete the following two-column proof.

Statements	Reasons
1. $\overline{OS} \parallel \overline{HE}$	1. Given
2. $\angle ROS \cong \angle H$, $\angle RSO \cong \angle E$	2. Corr ∠'s
3. $\triangle ROS \sim \triangle RHE$	3. AA Similarity Criterion
4. $\frac{HR}{OR} = \frac{RE}{RS}$	4. Def of ~ Δ's
5. $\frac{OR+HO}{OR} = \frac{RS+SE}{RS}$	5. Segment Addition Postulate
6. $\frac{OR}{OR} + \frac{HO}{OR} = \frac{RS}{RS} + \frac{SE}{RS}$	6. Substitution
7. $1 + \frac{HO}{OR} = 1 + \frac{SE}{RS}$	7. Substitution
8. $\frac{OH}{OR} = \frac{SE}{RS}$	8. Subtraction Property of Equality

2. Consider the diagram to the right.

Given: $\overline{WI} \parallel \overline{SG}$

Prove: $\frac{WN}{NG} = \frac{WI}{SG}$



Complete the following two-column proof.

Statements	Reasons
1. $\overline{WI} \parallel \overline{SG}$	1. Given
2. $\angle WNI \cong \angle GNS$	2. Vertical ∠'s
3. $\angle W \cong \angle G$	3. Alternate Interior Angles Theorem
4. $\triangle WNI \sim \triangle GNS$	4. AA~ Criterion
5. $\frac{WN}{NG} = \frac{WI}{SG}$	5. Def of ~ △'s