| What is | Similarity | y?—Recordir | ng Sheet |
|---------|------------|-------------|----------|
| | | | |

 $Length \cdot of \cdot hypotenuse \cdot of \cdot \Delta DEF$

1. Using the table below, record your measurements for the 3 triangles you've been given. Round each length to the nearest whole number. Round each angle to the nearest degree.

| Triangle | Hypotenuse | Shortest side | Middle side | Angles |
|----------|------------|---------------|-------------|--------|
| ΔABC | | | | |
| Δ DEF | | | | |
| ΔGHJ | | | | |

2. Now that you have the measures of all of the side lengths, use them to complete the calculations below.

| $\overline{Length \cdot of \cdot hypotenuse \cdot of \cdot \Delta ABC} =$ | $Length \cdot of \cdot hypotenuse \cdot of \cdot \Delta GHK =$ | | |
|---|---|--|--|
| $Length \cdot of \cdot shortest \cdot side \cdot of \cdot \Delta DEF$ | $Length \cdot of \cdot shortest \cdot side \cdot of \cdot \Delta DEF$ | | |
| $Length \cdot of \cdot shortest \cdot side \cdot of \cdot \Delta ABC =$ | $Length \cdot of \cdot shortest \cdot side \cdot of \cdot \Delta GHK$ | | |

 $Length \cdot of \cdot hypotenuse \cdot of \cdot \Delta DEF$

$$\frac{\textit{Length} \cdot \textit{of} \cdot \textit{middle} \cdot \textit{side} \cdot \textit{of} \cdot \Delta \textit{DEF}}{\textit{Length} \cdot \textit{of} \cdot \textit{middle} \cdot \textit{side} \cdot \textit{of} \cdot \Delta \textit{ABC}} = \frac{\textit{Length} \cdot \textit{of} \cdot \textit{middle} \cdot \textit{side} \cdot \textit{of} \cdot \Delta \textit{DEF}}{\textit{Length} \cdot \textit{of} \cdot \textit{middle} \cdot \textit{side} \cdot \textit{of} \cdot \Delta \textit{GHK}} =$$

3. What do you notice about the ratios you have calculated in each column? State each ratio. **This ratio** is called a <u>scale factor</u>.