Name:

Date:

School:

Facilitator:

**2.05 Triangle Similarity: SSS and SAS**

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| 1. | Look at the triangles and decide who has chosen the triangle that is similar to Δ*EFG*? And why?  Jack says triangle A and Jill says triangle B. | | |
|  | 08-04_agn1 | | |
|  | 08-04_agn1a  A | 08-04_agn1b  B | 08-04_agn1c  C |
|  | Answer: | | |
|  | Why? | | |

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| 2. | Decide whether Δ*ABC* and Δ*DEF* are similar, not similar, or cannot be determined for the given information. Include your reasoning. |
|  | 08-04_agn2 |
|  | Answer: |

\*\*continued on the next page\*\*

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| 3. | The triangles shown are similar. List all pairs of congruent angles and write the statement of proportionality. | | | | | | | | | |
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| **Determine if the triangles are similar. If they are:**  **a. List the congruent angles (if applicable).**  **b. Set-up a statement of proportionality for known sides.**  **c. Write a similarity statement in form Δ*ABC* ~ Δ*DEF*.** | | | | | | | | | | | | | | | | | |
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| 4. |  | | | | | | | | | | | | | | | | |
|  | Are the triangles similar? | | | | | | | | | | | | | | | | |
|  | If yes, which angles are congruent? | | | | | | | | | | | | | | | | |
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|  | Set-up the statement of proportionality for known sides. | | | | | | | | | | | | | | | | |
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|  | Complete the similarity statement:  By the       Similarity Theorem, Δ ~ Δ | | | | | | | | | | | | | | | | |

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| 5. |  | | | | | | | | |
|  | Are the triangles similar? | | | | | | | | |
|  | If yes, which angles are congruent? | | | | | | | | |
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|  | Set-up the statement of proportionality for known sides. | | | | | | | | |
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|  | Complete the similarity statement:  By the       Similarity Theorem, Δ ~ Δ | | | | | | | | |

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| 6. |  | | | | | | | | |
|  | Are the triangles similar? | | | | | | | | |
|  | If yes, which angles are congruent? | | | | | | | | |
|  | ∠     ≅∠ | | | ∠     ≅∠ | | | ∠     ≅∠ | | |
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|  | Set-up the statement of proportionality for known sides. | | | | | | | | |
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|  | Complete the similarity statement:  By the       Similarity Theorem, Δ ~ Δ | | | | | | | | |