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_agn1aA | 08-04_agn1bB | 08-04_agn1cC |
|  | 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? |
|  | ∠     ≅∠      | ∠     ≅∠      | ∠     ≅∠      |
|  |  |  |  |  |  |  |  |  |  |
|  | 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? |
|  | ∠     ≅∠      | ∠     ≅∠      | ∠     ≅∠      |
|  |  |  |  |  |  |  |  |  |  |
|  | 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. |
|  |       | = |       | = |       |  |  |  |  |
|  |       |       |       |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Complete the similarity statement: By the       Similarity Theorem, Δ ~ Δ |