GSE Geometrywith Support **Unit 2 Part 3 Review Sheet** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Congruency

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| **Topic**: Corresponding Parts | **Things to Remember**:* Triangle statement must have the SAME ORDER (follow congruent marks!)
 |
| **Examples**: |
| Image result for congruent triangles1. $∠G≅\\_\\_\\_\\_\\_$
2. $\overbar{MK}≅\\_\\_\\_\\_\\_\\_$
3. $∠HFG≅\_{\\_\\_\\_\\_\\_\\_\\_}$
4. $\overbar{HG}≅\\_\\_\\_\\_\\_\\_\\_$
 | 2. $∆MON≅∆YET$1. $∠N≅\\_\\_\\_\\_\\_$
2. $\overbar{ET}≅\\_\\_\\_\\_\\_\\_$
3. $∠ONM≅\_{\\_\\_\\_\\_\\_\\_\\_\\_\\_}$
4. $\overbar{NM}≅\\_\\_\\_\\_\\_\\_\\_$
 |
| **Topic**: Triangle Congruency | **Things to Remember**: * Triangles can be congruent 5 different ways: SSS, SAS, AAS, ASA, and HL
 |
| **Examples**: |
| 3. $∆GHI≅∆\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_\_CGFIH | 4. $∆ABD≅∆\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_ABCD  |
| 5. $M $bisects PN and KQ$∆PMK≅∆\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_ | 6. Are these triangles congruent? Why or why not? |
| 7. $∆CAB≅∆\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_Image result for sss triangles | 8. $∆KLP≅∆\\_\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_ |
| 9. **Given**: $∠A≅∠X$ and$ ∠C≅∠Z$What OTHER piece of information is needed to show $∆ABC$ and $∆XYZ$ by ASA?Image result for triangle abc and xyz | 10. **Given**: $BC≅YZ$ and$ ∠C≅∠Z$What OTHER piece of information is needed to show $∆ABC$ and $∆XYZ$ by AAS?Image result for triangle abc and xyz |
| 11. **Given**: $∠A≅∠X$ and$ BA≅YX$What OTHER piece of information is needed to show $∆ABC$ and $∆XYZ$ by SAS?Image result for triangle abc and xyz | 12. **Given**: $BC≅YZ$ and$ BA≅YX$What OTHER piece of information is needed to show $∆ABC$ and $∆XYZ$ by SSS?Image result for triangle abc and xyz |
| 13. **Given**: $BC≅YZ$ and$ BA≅YX$What OTHER piece of information is needed to show $∆ABC$ and $∆XYZ$ by SAS?Image result for triangle abc and xyz | 14. **Given**: $∠CXA and ∠BXA$ are right angles What OTHER piece of information is needed to show $∆CXA$ and $∆BXA$ by HL?Related image |

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| **Topic**: Proofs | **Things to Remember**:* State what is given FIRST
* MARK YOUR DIAGRAM!
* Step 1 – Write down the givens
* Step 2 – Make any marks that you know are congruent (reflexive property, vertical angles,)
* Step 3 – **BUILD OFF YOUR GIVENS; YOU CANNOT ASSUME ANYTHING IF IT IS NOT TOLD TO YOU!!!**
* Step 4– Statement will always be showing the Triangles are (SSS, SAS, ASA, AAS, HL
 |
| **Examples**:SSS SAS ASA AAS HL Vertical Angles are  Reflexive Property Given Definition of Bisector  |
| Image result for HL congruence  | 15. If D bisects AC, what can you assume? |
| 16. Are the two triangles to the left, sharing anything? If so, what are they sharing? |
| 17. Given: $\overbar{AB}≅\overbar{DC}$ and $∠B≅∠D$Prove:

|  |  |
| --- | --- |
| **Statements** | **Reasons** |
| 1.  | 1.  |
| 2.  | 2. |
| 3.  | 3.  |
| 4.  | 4.  |

 | 18. Given: $T$ bisects RV and US Prove:

|  |  |
| --- | --- |
| **Statements** | **Reasons** |
| 1.  | 1.  |
| 2.  | 2.  |
| 3.  | 3.  |
| 4.  | 4. |
| 5.  | 5.  |

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