GSE Geometrywith Support **Unit 2 Part 3 Review Sheet #2** 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. $∠H≅\\_\\_\\_\\_\\_$
2. $\overbar{GH}≅\\_\\_\\_\\_\\_\\_$
3. $∠KLM≅\_{\\_\\_\\_\\_\\_\\_\\_}$
4. $\overbar{ML}≅\\_\\_\\_\\_\\_\\_\\_$
 | 2. $∆MON≅∆YET$1. $∠Y≅\\_\\_\\_\\_\\_$
2. $\overbar{MO}≅\\_\\_\\_\\_\\_\\_$
3. $∠TYE≅\_{\\_\\_\\_\\_\\_\\_\\_\\_\\_}$
4. $\overbar{NO}≅\\_\\_\\_\\_\\_\\_\\_$
 |
| **Topic**: Triangle Congruency | **Things to Remember**: * Triangles can be congruent 5 different ways: SSS, SAS, AAS, ASA, and HL
 |
| **Examples**: |
| 3. $∆CBA≅∆\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_\_See the source image | 4. $∆ABP≅∆\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_See the source image |
| 5. $∆DEF≅∆\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_See the source image | 6. Are these triangles congruent? Why or why not? See the source image |
| 7. $∆CAB≅∆\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_See the source image | 8. $∆SQP≅∆\\_\\_\\_\\_\\_\\_\\_\\_\\_$ by \_\_\_\_\_\_See the source image |
| 9. **Given**: $∠G≅∠K$ and$ GF≅JK$What OTHER piece of information is needed to show $∆GFH$ and $∆KJH$ by ASA?See the source image | 10. **Given**: $GH≅HK$ and$ ∠F≅∠J$What OTHER piece of information is needed to show $∆GFH$ and $∆KJH$ by AAS?See the source image |
| 11. **Given**: $∠FHG≅∠JHK$ and$ FH≅JH$What OTHER piece of information is needed to show $∆GFH$ and $∆KJH$ by SAS?See the source image | 12. **Given**: $GH≅HK$ and$ GF≅JK$What OTHER piece of information is needed to show $∆GFH$ and $∆KJH$ by SSS?See the source image |
| 13. **Given**: $GF≅JK$ and$ GH≅HK$What OTHER piece of information is needed to show $∆GFH$ and $∆KJH$ by SAS?See the source image | 14. WhatOTHER piece of information is needed to show $∆STU$ and $∆HGF$ by HL? See the source image |
| 15. WhatOTHER piece of information is needed to show $∆ABC$ and $∆HIJ$ by ASA?See the source image | 16. **Given**: $∠B≅∠D$What OTHER piece of information is needed to show $∆ABC$ and $∆ADC$ by AAS?See the source image |
| **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**: |
| 17. If M bisects XY, what can you assume?See the source image | 18. If T bisects RV and US, what can you assume? |
| SSS SAS ASA AAS HL Vertical Angles are  Reflexive Property Given Definition of Bisector  |
| 19. Given: M bisects XY and $XA≅YA$ Prove:  See the source image

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

 | 20. Prove: See the source image

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

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