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$\qquad$ 5.7 Overlapping Congruent Triangle Proofs DAY THREE CYU
$\square$ Use when you get it right all by yourself
SUse when you did it all by yourself, but made a silly mistake
$\boldsymbol{H}$ Use when you could do it alone with a little help from teacher or peer
GUse when you completed the problem in a group
XUse when a question was attempted but wrong (get help)
NUse when a question was not even attempted

| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| :--- | :---: | :---: | :---: |
| Reflexive POC | $1-6$ |  |  |
| SAS, SSS, AAS, HL, ASA | $1-6$ |  |  |
| CPCTC | $1,5,6$ |  |  |
| Def of Perpendicular Lines | $1,3,5$ |  |  |
| Def of Midpoint | 3 |  |  |

Create a two-column proof on your own paper. Label the statements and reasons columns and be sure to number each step of the proof. Use correct notation. Only mark your diagram after writing the information in your proof. It might help to redraw your diagram as separate triangles relevant to the proof.

1. Given: $\overline{K A} \perp \overline{A R} ; \overline{Y R} \perp \overline{A R} ; \angle A K R \cong \angle R Y A$

Prove: $\overline{D K} \cong \overline{D Y}$

2. Given: $\angle \mathrm{JAM} \cong \angle \mathrm{IMA} ; \overline{\mathrm{JE}} \cong \overline{\mathrm{IE}} ; \overline{\mathrm{AE}} \cong \overline{\mathrm{ME}}$ Prove: $\triangle \mathrm{JAM} \cong \triangle \mathrm{IMA}$

3. Given: $V$ is the midpoint of $\overline{\mathrm{ZX}} ; \overline{\mathrm{UY}} \perp \overline{\mathrm{XZ}}$

Prove: $\Delta Z U Y \cong \Delta X U Y$

4. Given: $\angle \mathrm{PRT} \cong \angle \mathrm{QST} ; \overline{\mathrm{RT}} \cong \overline{\mathrm{ST}} ; \overline{\mathrm{RU}} \cong \overline{\mathrm{US}}$

Prove: $\triangle \mathrm{URQ} \cong \Delta \mathrm{USP}$

5. Given: $\overline{\mathrm{HG}} \perp \overline{\mathrm{GT}} ; \overline{\mathrm{TM}} \perp \overline{\mathrm{MH}} ; \angle \mathrm{GTH} \cong \angle \mathrm{MHT}$

Prove: $\overline{\mathrm{GE}} \cong \overline{\mathrm{ME}}$

6. Given: $\overline{W S} \cong \overline{Y S} ; \overline{W C} \cong \overline{Y B}$

Prove: $\overline{C O} \cong \overline{B O}$


CYU Reflection: How far can you go: basic, intermediate, or advanced? Rate your mastery level!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.


