Geometry - Congruent Triangles
12c Homework: Justifying Triangles are Congruent

Name
Pd ___ Date ___
1.

Given: $\quad \overline{O R}$ and $\overline{S P}$ bisect each other

Prove: $\quad \triangle O N P \cong \triangle R N S$


|  | What were we trying to do? What was our thought process? | What statements can we make that must be true? | How do we know those statements must be true? |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Part } \\ \text { I } \end{gathered}$ | State what must be obviously true based on the given information. | - | Given |
| $\begin{array}{\|c\|} \hline \text { Part } \\ \text { II } \end{array}$ | Use what we previously learned (along with the given information) to figure out what else must be true. |  |  |
| Part <br> III | Our destination (our goal) was to prove that the two triangles are congruent. | - | Reason: $\qquad$ <br> (based on what we stated must be true in Parts I and II, we need to determine why we can say for sure that we reached our destination) |

2. 

Given: $\quad \overline{C K}$ is the perpendicular bisector of $\overline{H J}$


|  | What were we trying to do? What was our thought process? | What statements can we make that must be true? | How do we know those statements must be true? |
| :---: | :---: | :---: | :---: |
| $\begin{array}{\|c} \text { Part } \\ \text { I } \end{array}$ | State what must be obviously true based on the given information. |  |  |
| $\begin{gathered} \text { Part } \\ \text { II } \end{gathered}$ | Use what we previously learned (along with the given information) to figure out what else must be true. |  |  |
| Part III | Our destination (our goal) was to prove that the two SEGMENTS are congruent. | - | Reason: $\qquad$ <br> (based on what we stated must be true in Parts I and II, we need to determine why we can say for sure that we reached our destination) |

