$\qquad$
$\qquad$ Period $\qquad$ 7.8.D3 ~ Congruent Triagngle Proofs

## PROOFS MUST BE DONE ON PROOF PAPER.

1. Given: $\angle F G H$ is a right $\angle$ $\angle J H G$ is a right $\angle$ $\overline{F G} \cong \overline{J H}$
Prove: $\quad \triangle F G H \cong \triangle J H G$

2. Given: $\overline{P M} \cong \overline{R M}$

$$
\angle S P M \cong \angle O R M
$$

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

4. Given: $\overline{J H} \cong \overline{K H}$

$$
\overline{H G} \cong \overline{H M}
$$

$$
\angle 5 \cong \angle 6
$$

Prove: $\triangle J H G \cong \triangle K H M$
5. Given: $\angle 1$ is comp. to $\angle 2$ $\angle 3$ is comp. to $\angle 4$ $\angle 1 \cong \angle 3$
Prove: $\triangle A B C \cong \triangle D C B$


|  | $\angle 3$ is comp. to $\angle 4$ |
| ---: | :--- |
| $\angle 1 \cong \angle 3$ |  |


6. Given: $\angle 9 \cong \angle 10$
$\begin{array}{ll} & \angle G F H \cong \angle H J G \\ \text { Prove: } & \triangle G F J \cong \triangle H J F\end{array}$


|  |  | WHAT I KNOW IS CONGRUENT | WHAT I NEED TO KNOW |
| :---: | :---: | :---: | :---: |
| 7 | sss |  |  |
| 8 |  |  |  |
| 9 | ASA |  |  |
| 10 | SAS |  |  |
| 11 |  |  |  |
| 12 | AAS |  |  |

