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## 7.5 \& 7.6 - ASA \& AAS Congruence Theorems

$\qquad$ Period $\qquad$

Determine whether each pair of given triangles are congruent by ASA or AAS. Use the Distance Formula and a protractor when necessary.

1. Determine whether $\triangle C K Y$ is congruent to $\triangle D L Z$ by ASA.

2. Determine whether $\triangle F M R$ is congruent to $\triangle J Q W$ by ASA.

3. Determine whether $\triangle C K Y$ is congruent to $\triangle D L Z$ by AAS.

4. Determine whether $\triangle F M R$ is congruent to $\triangle J Q W$ by AAS.


Determine the angle measure or side measure that is needed in order to prove that each set of triangles are congruent by AAS.
5. In $\triangle A N T, m \angle A=30^{\circ}, m \angle N=60^{\circ}, \& N T=5$. In $\triangle B U G, m \angle U=60^{\circ} \& U G=5$.
6. In $\triangle B C D, m \angle B=25^{\circ} \& m \angle D=105^{\circ}$. In
$\triangle R S T, R S=12, m \angle R=25^{\circ}, \& m \angle T=105^{\circ}$.

Determine whether there is enough information to prove that each pair of triangles are congruent by ASA or AAS. Explain your reasoning.
7. $\triangle A B D \cong \triangle C B D$

8. $\triangle E F G \cong \triangle H J K$

9. $\triangle M N Q \cong \triangle P Q N$

10. $\triangle R S T \cong \triangle W Z T$

11. $\triangle B D M \cong \triangle M D H$

12. $\triangle F G H \cong \triangle J H G$


