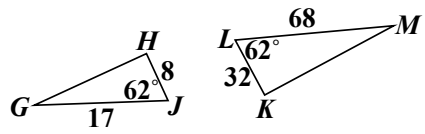
Name: _____

Proving Triangles Congruent or Similar

Congruence Properties	Similarity Properties
SSS SAS ASA AAS HL	**SSS SAS AA**
Remember: Sides have to be the same. Angles have to be the same.	Remember: Side FRACTIONS have to be the same. Angles have to be the same.

Determine what property can be used to prove that the triangles are **similar**. Then, fill in the similarity statement using the correct letter order.

1.



$\triangle GHJ \sim \triangle$ _____ by which property?
SSS SAS AA

2.

$$\frac{GH}{MK} = \frac{HJ}{KL}$$

$$\frac{GH}{MK} = \frac{GJ}{ML}$$

$\triangle GHJ \sim \triangle$ _____ by which property?
SSS SAS AA

3.

$$\angle G \cong \angle K$$

$$\angle H \cong \angle L$$

$\triangle GHJ \sim \triangle$ _____ by which property?
SSS SAS AA

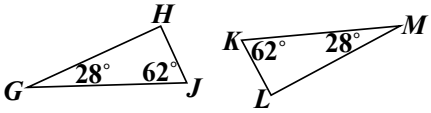
4.

$$\frac{GH}{KL} = \frac{HJ}{LM}$$

$$\angle H \cong \angle L$$

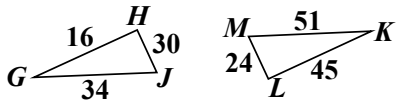
$\triangle GHJ \sim \triangle$ _____ by which property?
SSS SAS AA

5.



$\triangle GHJ \sim \triangle$ _____ by which property?
SSS SAS AA

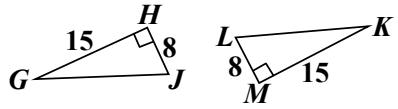
6.



$\triangle GHJ \sim \triangle$ _____ by which property?
SSS SAS AA

Determine what property can be used to prove that the triangles are **congruent**. Then, fill in the congruence statement using the correct letter order.

7.



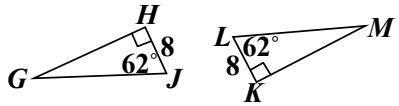
$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL

8.

$$\overline{GH} \cong \overline{MK}$$
$$\overline{HJ} \cong \overline{KL}$$
$$\overline{GJ} \cong \overline{ML}$$

$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL

9.



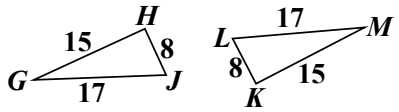
$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL

10.

$$\overline{GJ} \cong \overline{MK}$$
$$\angle G \cong \angle M$$
$$\angle J \cong \angle K$$

$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL

11.



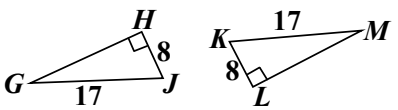
$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL

12.

$$\overline{HJ} \cong \overline{KL}$$
$$\overline{GJ} \cong \overline{ML}$$
$$\angle J \cong \angle L$$

$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL

13.



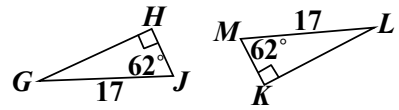
$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL

14.

$$\overline{GJ} \cong \overline{ML}$$
$$\angle J \cong \angle L$$
$$\angle H \cong \angle K$$

$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL

15.



$\triangle GHJ \cong \triangle$ _____ by which property?
SSS SAS ASA AAS HL