# Proving Triangles are Congruent!! 

Ex. 1

$\triangle C A T \cong \triangle D O G$
by SSS

- | Ex 2 |
| :--- | :--- |


$\triangle R E D \cong \triangle C A P$
by SAS

Ex 3

$\triangle B O X \cong \triangle C A R$
by ASA

- $\mid$ Ex 4
$\Delta S T R \cong \triangle Q U R$

by ASA
- $\mid$ Ex 5



## $\triangle M O N \cong \triangle K E Y$

by HL

- $\mid$ Ex 6

$\triangle A B C \cong \triangle D E F$
by ASA
- $\mid$ Ex 7



## $\Delta G H I \cong \Delta L K J$

by SAS

- | Ex 8 |
| :--- | :--- |



## $\Delta R S Q \cong \Delta T S Q$

by HL

- Ex 9


No not enough info

## 



## $\triangle A B C \cong \triangle D F E$

by AAS

- $\mid$ Ex 11



## $\triangle M N P \cong \triangle O N P$

by SSS



Ex 13
$\triangle X W Z \cong \triangle X Y Z$
Y
by AAS

Ex 14

$\Delta G H I \cong \Delta I J G$ by SSS

Ex 15

Hint: Use Pythagorean Thm

$\triangle G H E \cong \triangle H G I$ by SSS or HL

Hint: TU is parallel to WV and TV is the transversal
$\Delta T X U \cong \Delta V X W$
by ASA

- $\mid$ Ex 17



## $\Delta L K M \cong \triangle M N K$ by ASA

## Ex 18



Not congruent
AAA does not work

- Ex 19


Ex 20


