

Proving Triangle Congruence by SAS & HL
Unit 4: Similarities

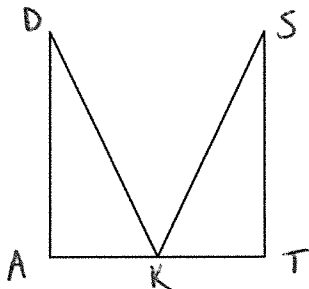
Prove each of the following using an emphasis on Side-Angle-Side and Hypotenuse-Leg:

1. Given: $\overline{DK} \cong \overline{SK}$

$\angle AKD \cong \angle TKS$

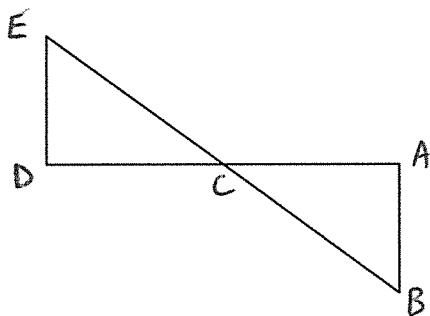
K is the midpoint of \overline{AT}

Prove: $\triangle DKA \cong \triangle SKT$



2. Given: C is the midpoint of \overline{AD} & \overline{BE}

Prove: $\triangle CAB \cong \triangle CDE$

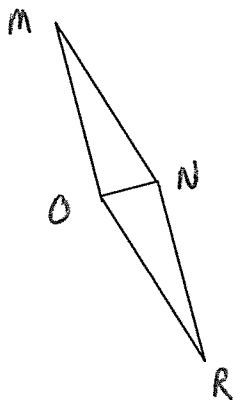


3. Given: $\overline{MN} \cong \overline{RO}$

\overline{MO} is perpendicular to \overline{ON}

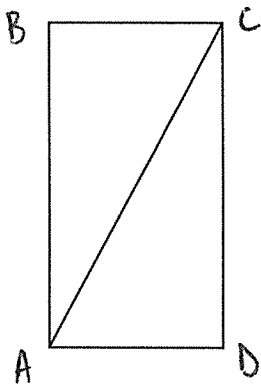
\overline{RN} is perpendicular to \overline{ON}

Prove: $\triangle MON \cong \triangle RNO$



4. **Given:** ABCD is a rectangle

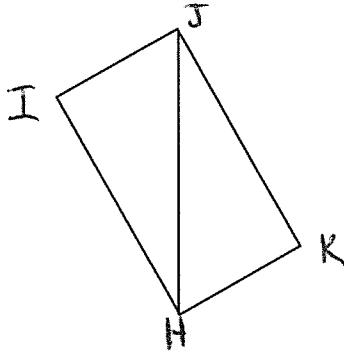
Prove: $\triangle BCA \cong \triangle DAC$



Prove each of the following using an emphasis on Side-Side-Side:

5. **Given:** $\overline{HI} \cong \overline{JK}$
 $\overline{IJ} \cong \overline{KH}$

Prove: $\triangle JHI \cong \triangle HJK$



6. **Given:** $\overline{WX} \cong \overline{YX}$

Z is the midpoint of \overline{WY}

Prove: $\triangle WXZ \cong \triangle YXZ$

