**HW: Congruent Figures Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. If $WXYZ≅JKLM$, then list the following:



1. Four pairs of congruent sides
2. Four pairs of congruent angles
3. For each figure below, can you conclude the triangles are congruent? If they are congruent, list the congruent theorem. If not, explain your reasoning.



1. $∆ABC≅∆DEF$. Find the measure of BC and EF if $BC=3z+2$ and $EF=z+6$.
2. Given: $\overbar{AD} and \overbar{BE} bisect each other$

$\overbar{AB}≅\overbar{DE}$, $∠A≅∠D$

 Prove: $∆ACB≅∆DCE$

 Statements Reasons

1. $\overbar{AD} and \overbar{BE} bisect each other$ 1.

$ \overbar{AB}≅\overbar{DE}$, $∠A≅∠D$

1. $\overbar{AC}≅\overbar{CE}$ and $\overbar{BC}≅\overbar{CE}$ 2.
2. $∠ACB≅∠DED$ 3.
3. $∠B≅∠E$ 4.
4. $∆ACB≅∆DCE$ 5.
5. Find the value of the x in the figure below:



1. Given: $\overbar{BD}$ is the angle bisector of $∠ABC$

$\overbar{BD}$ is the perpendicular bisector of $\overbar{AC}$

 Prove: $∆ADB≅∆CDB$