## Congruent Triangles Worksheet

1) In what way is $\triangle D E F$ congruent to $\triangle A B C$ ? Find the value of each of the sides in the given pair of triangles.

2) Can you give a brief reason why $\triangle A B C$ is congruent to triangle $\triangle X Y Z$ ? If angle C is represented by $2 x-10$ and angle $Z$ is represented by $3 x-40$, find the measure of angle $\boldsymbol{x}$.

3) Given: $\overline{\mathrm{MK}} \cong \overline{\mathrm{OK}}$ $\overline{\mathrm{KJ}}$ bisects $\angle \mathrm{MKO}$
Prove: $\overline{\mathrm{KJ}}$ bisects $\angle \mathrm{MJO}$

4) Give a brief reason why $\triangle D E F$ and $\triangle A B C$ are congruent. Find the value of each of the angles in the given pair of triangles.

5) Prove that $\triangle D E F$ is congruent to $\triangle A B C$. Find the value of $\boldsymbol{x} \& \boldsymbol{y}$ from the information shown in the given pair of triangles.

6) Given: $\overline{\mathrm{AD}} \square \overline{\mathrm{BC}}$

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\overline{\mathrm{AD}} \cong \overline{\mathrm{BC}}
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Prove: $\overline{\mathrm{AB}} \cong \overline{\mathrm{CD}}$


