## Name:

## Congruent Triangles

A) 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


1) EF
2) $A B$
3) $A C$
B) 4) Determine which postulate can be used to prove that the triangles are congruent. If it is not possible to prove that they are congruent, write not possible.

C) 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 $3 x-40$.

4) Find the measure of angle $x$.
D) 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) $m \angle E F D$
6) $m \angle F E D$
7) $m \angle E F D$
