## Congruence and Parallel Line Properties Test Review

1. Explain why rigid motions create congruent figures.
2. For each of figures state if they are congruent and explain how you know.
a.


c.

d.

3. Given that $\| \mid m$, prove $\angle 4 \cong \angle 5$


Prove the following using the given image.
5. Given that lines I and $m$ are parallel Prove: angle 8 is congruent to angle 2

6. Given that lines I and $m$ are parallel Prove: angle 4 and 5 are supplementary

Determine the relationship for each pair of angles. Use that relationship to solve for $\boldsymbol{x}$.
1)

2)

3)

4)

5)

6)


