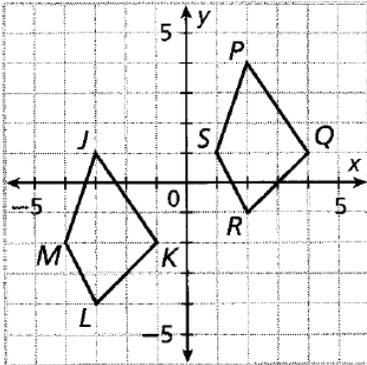


Use the definition of congruence in terms of rigid motions to determine whether the two figures are congruent (circle your answer), explain your answer in terms of specific rigid motion(s), and write a congruence statement.

1.

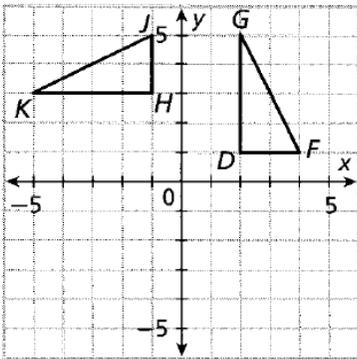


Congruent Not Congruent

Rigid Motion(s):

Congruence Statement:

2.



Congruent Not Congruent

Explanation:

Congruence Statement:

3. Given that $\triangle PQR \cong \triangle STU$, $PQ = 2.7$ ft, $PR = 3.4$ ft, and $m\angle T = 35^\circ$, what other sides and/or angles do you know the measure of? What are the measures of those sides/angles?

4. Given that $\triangle SEW \cong \triangle FAR$, $m\angle E = 5(x - 2)$, $m\angle W = 3x + 14$, and $m\angle R = 7x - 34$, find x , then find $m\angle S$.

5. Given $\triangle DEF \cong \triangle MNP$. Complete the following statements.

a) $\angle F \cong \angle$ _____

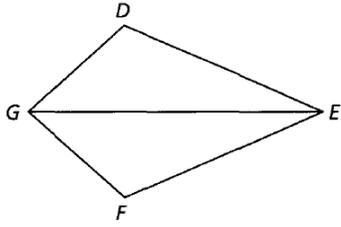
b) $NP \cong$ _____

c) $m\angle M \cong m\angle$ _____

d) $\overline{FD} \cong$ _____

6. Given $\triangle WXY \cong \triangle LMN$, write as many statements about congruent corresponding parts as possible.

7. Given: \overline{GE} bisects $\angle DGF$ and $\angle DEF$



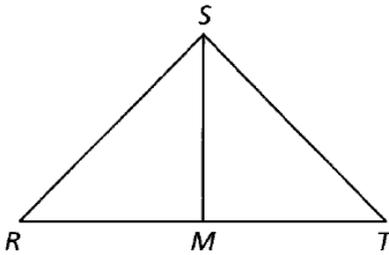
CONGRUENT NOT CONGRUENT

Shortcut: _____

$\triangle DGE \cong$ _____

Additional Reason(s):

8. Given: M is the midpoint of \overline{RT} and $\triangle SRT$ is isosceles with base \overline{RT}



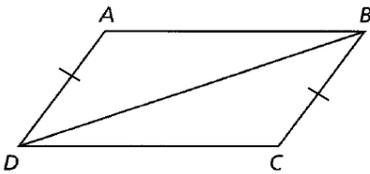
CONGRUENT NOT CONGRUENT

Shortcut: _____

$\triangle MRS \cong$ _____

Additional Reason(s):

9.



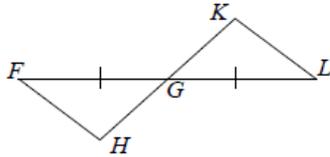
CONGRUENT NOT CONGRUENT

Shortcut: _____

$\triangle ABD \cong$ _____

Additional Reason(s):

10.



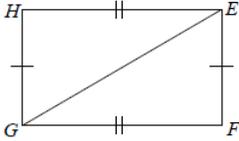
CONGRUENT NOT CONGRUENT

Shortcut: _____

$\triangle FGH \cong$ _____

Additional Reason(s):

11.



CONGRUENT NOT CONGRUENT

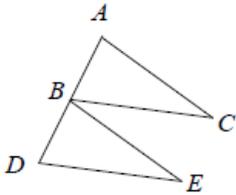
Shortcut: _____

$\triangle EGH \cong$ _____

Additional Reason(s):

12. Given: B is the midpoint of \overline{AD} , $\angle C \cong \angle E$, $\angle A \cong \angle DBE$

CONGRUENT NOT CONGRUENT



Shortcut: _____

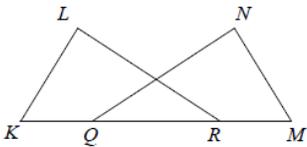
$\triangle ABC \cong$ _____

Additional Reason(s):

13. Given: $\angle MQN \cong \angle KRL$, $\angle N \cong \angle L$, $\overline{KQ} \cong \overline{MR}$

(Draw Δ 's separately first)

CONGRUENT NOT CONGRUENT



Shortcut: _____

$\triangle KLR \cong$ _____

Additional Reason(s):
