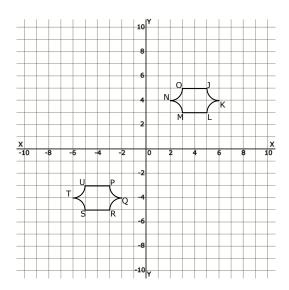
## Rigid Motions and Congruent Triangles - Independent Practice Worksheet

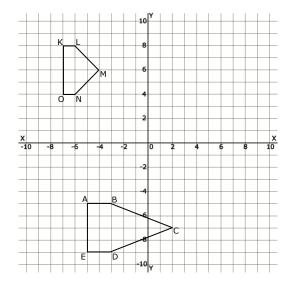
Complete all the problems. Make sure to draw pictures to help you solve the problems.

Use the definition of congruence in terms of rigid motions to determine whether the two figures are congruent and explain your answer.

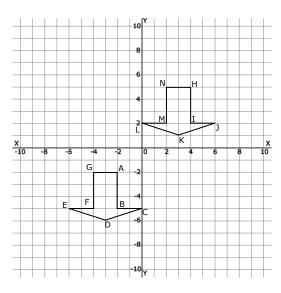
1) You can map PQRSTU to JKLMNO by the translation. Find the coordinate notation.



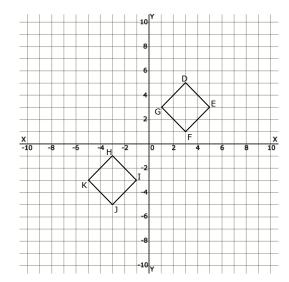
2) KLMNO and ABCDE have different sizes. Since rigid motions preserve distance, there is no sequence of rigid motions that will map  $\Delta$  KLM to PQR. Find the coordinate notation.



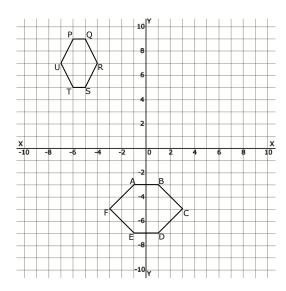
3) You can map ABCDEFG to HIJKLMN by a reflection followed by a translation. Provide the coordinate notation for each.



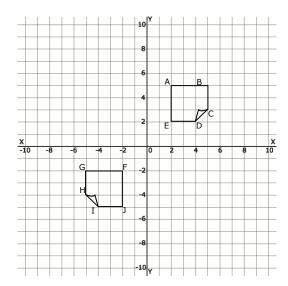
4) You can map DEFG to HIJK by the translation. Find the coordinate notation.



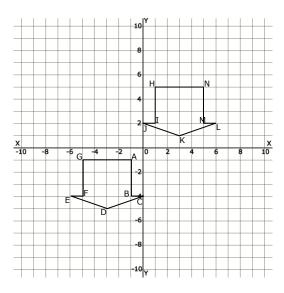
5) KLMNO and ABCDE have different sizes. Since rigid motions preserve distance, there is no sequence of rigid motions that will map  $\Delta$  KLM to PQR. Find the coordinate notation.



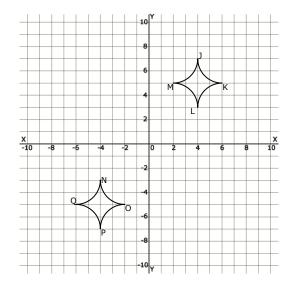
6) You can map ABCDE to FGHIJ by a reflection followed by a translation. Provide the coordinate notation for each.



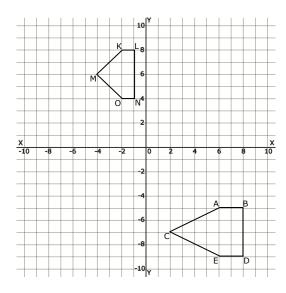
7) You can map ABCDEFG to HIJKLMN by a reflection followed by a translation. Provide the coordinate notation for each.



8) You can map JKLM to NOPQ by the translation. Find the coordinate notation.



9) KLMNO and ABCDE have different sizes. Since rigid motions preserve distance, there is no sequence of rigid motions that will map  $\Delta$  KLM to PQR. Find the coordinate notation.



10) You can map ABCDEF to GHIJKL by the translation. Find the coordinate notation.

