



9-1 Solve It!




Think about how you can slide the pieces of paper around to turn Word A into Word B.



SOLVE IT!

Getting Ready!

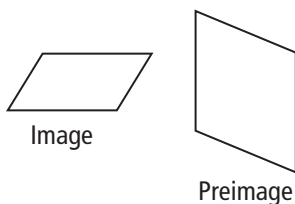


Suppose you write the letters shown on squares of tracing paper, so their shapes are visible from both sides. For each pair of words, how can you move the squares of paper to change Word A into Word B? Describe each movement in as much detail as you can. Note: No square should remain in its original position.

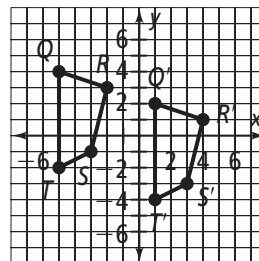
Word A	→	Word B
H U M	→	I C E
b o b	→	P o d
z I P	→	P I N

9-1 Lesson Quiz

1. Does the transformation below appear to be an isometry? Explain.



2. What is a rule that describes the translation $QRST \rightarrow Q'R'S'T'$?



3. Do you UNDERSTAND? What are the images of the vertices of ABC for the translation $(x, y) \rightarrow (x - 2, y + 3)$? The vertices are $A(5, 6)$, $B(6, -3)$, and $C(7, 2)$.

Answers

Solve It!

Answers may vary. Sample: "HUM" to "ICE": rotate H 90° clockwise, rotate U 90° clockwise, and rotate M 90° counterclockwise; "bob" to "pod": turn b over top to

bottom, rotate o 180° clockwise, and turn b over left to right; "ZIP" to "PIN": rotate Z 90° counterclockwise and slide it to the third position, turn I over, and slide P to the first position.

Lesson Quiz

- No, the figures do not appear to be congruent.
- $(x, y) \rightarrow (x + 6, y - 2)$
- $A'(3, 9)$, $B'(4, 0)$, $C'(5, 5)$