Name _____ Date _____

4.3 Puzzle Time

What Did One Parallel Line Say To The Other Parallel Line?

A	B	C	D	E	F
G					

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

(1, 1) **MEET**
symmetric **AND**
rotation **WHAT**
(a, b) **DOWN**
(3, −5) **SKINNY**
(3, −4) **NEVER**
(b, −a) **WE**

Complete the sentence.

A. A _____ is a transformation in which a figure is turned about a fixed point.

B. When a point (a, b) is rotated counterclockwise about the origin for a rotation of 90°, $(a, b) \rightarrow ($ ____ $).$

C. When a point (a, b) is rotated counterclockwise about the origin for a rotation of 180°, $(a, b) \rightarrow ($ ____ $).$

D. When a point (a, b) is rotated counterclockwise about the origin for a rotation of 270°, $(a, b) \rightarrow ($ ____ $).$

Triangle ABC has vertices A(−3, 5), B(4, 3), and C(−1, 1).

Find the vertex of the image after a 270° rotation about the origin.

E. A'

F. B'

G. C'

(−a, −a) **STRAIGHT**
(−a, −b) **SHAME**
(5, 3) **WILL**
(−1, −1) **NAMED**
(−b, a) **A**
(0, 0) **DEEP**
(3, 4) **LONG**