



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	<p>Complete the sentence.</p> <p>A. A _____ is a transformation in which a figure is turned about a fixed point.</p> <p>B. When a point (a, b) is rotated counterclockwise about the origin for a rotation of 90°, $(a, b) \rightarrow (\rule{1cm}{0.4pt})$.</p> <p>C. When a point (a, b) is rotated counterclockwise about the origin for a rotation of 180°, $(a, b) \rightarrow (\rule{1cm}{0.4pt})$.</p> <p>D. When a point (a, b) is rotated counterclockwise about the origin for a rotation of 270°, $(a, b) \rightarrow (\rule{1cm}{0.4pt})$.</p> <p>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.</p> <p>E. A'</p> <p>F. B'</p> <p>G. C'</p>	(-a, -a) STRAIGHT
symmetric AND		(-a, -b) SHAME
rotation WHAT		(5, 3) WILL
(a, b) DOWN		(-1, -1) NAMED
(3, -5) SKINNY		(-b, a) A
(3, -4) NEVER		(0, 0) DEEP
(b, -a) WE		(3, 4) LONG



Puzzle Time

What Geometric Figure Is Like A Lost Parrot?

Write the letter of each answer in the box containing the exercise number.

- Complete the sentence. Two geometric figures are _____ figures if and only if there is a rigid motion or a composition of rigid motions that maps one of the figures onto the other.
- Congruent figures have the same size and shape. True or false?
- Are three equilateral triangles with respective sides of 3 centimeters, 4 centimeters, and 4 inches congruent?
Yes or no?
- A figure is reflected in line k , and the image is then reflected in line m . The measure of the acute angle formed between lines k and m is 42° . What is the angle of rotation?

Given $\triangle ABC$ with vertices $A(2, 3)$, $B(4, 3)$, and $C(4, -5)$, and the translation $(x, y) \rightarrow (x + 2, y - 1)$, find the vertex of the image.

- A'
- B'
- C'
- Complete the sentence. The polygons with vertices $A(0, 7)$, $B(0, 4)$, $C(5, 4)$, $D(5, 7)$ and $E(7, 3)$, $F(7, 0)$, $G(12, 0)$, $H(12, 3)$ _____ congruent.

Answers

- R. are not
- I. constructed
- N. $(6, -6)$
- M. yes
- A. are
- B. $(2, 6)$
- G. $(4, 2)$
- L. 84
- P. no
- E. 42
- O. true
- X. $(2, 4)$
- Y. congruent
- O. $(6, 2)$
- U. $(-6, 6)$

8		3	6	4	1	5	2	7
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