



# 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  $42^\circ$ . 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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