6-4

Standardized Test Prep

Properties of Rhombuses, Rectangles, and Squares

Multiple Choice

For Exercises 1-6, choose the correct letter.

Use rhombus TQRS for Exercises 1-4.

1. What is the measure of $\angle 1$?

(A) 47

C 74

B 37

D 53

2. What is the measure of $\angle 2$?

F) 47

G 74

(H) 37

 $\begin{array}{c} 2 \\ y \\ 1 \\ 53^{\circ} \end{array}$

 \bigcirc 53

3. What is the value of *x*?

(A) 2

B) 1

© 5

D 4

4. What is the value of *y*?

F 4

G 3

(H) 2

 \bigcirc 1

5. What statement would be sufficient to prove that a quadrilateral is a rhombus?

(A) The quadrilateral has four congruent angles.

B The quadrilateral has two pairs of parallel sides.

The quadrilateral has four congruent sides.

• The quadrilateral has two pairs of congruent angles.

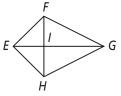
6. *EFGH* is a kite. To prove that the diagonals of a kite are perpendicular, which pair of angles must you prove congruent using CPCTC?

 \bigcirc F \angle *EFI* and \angle *EHI*

 \bigcirc \angle *EIF* and \angle *EIH*

 \bigcirc $\angle GFI$ and $\angle GHI$

 \bigcirc \angle FIE and \angle HIG



Short Response

7. Why is it that the statement "all rhombuses are squares" is false, but the statement "all squares are rhombuses" is true? Explain.