Name Key Date _____ Pd ____

7.5 Kite CYU

☑ *Use when you get it right all by yourself*

S *Use when you did it all by yourself, but made a silly mistake*

H *Use when you could do it alone with a little help from teacher or peer*

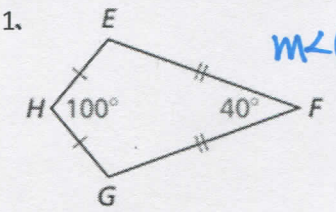
G *Use when you completed the problem in a group*

X *Use when a question was attempted but wrong (get help)*

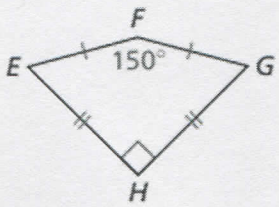
N *Use when a question was not even attempted*

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Applying kite properties	1 - 4	5	8, 9
Classifying quadrilaterals		6, 7	10
Describing transformations		11, 12	

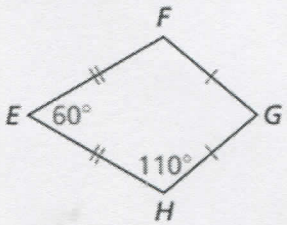
Find m∠G.

1. 

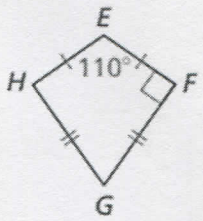
m∠G = 110°

2. 

m∠G = 60°

3. 

m∠G = 80°

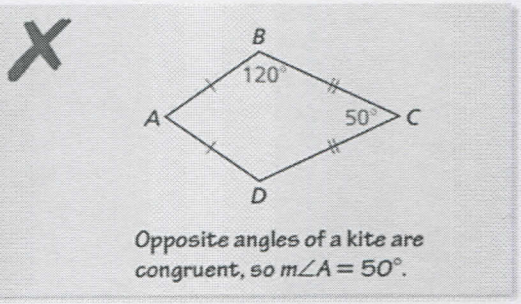
4. 

m∠G = 70°

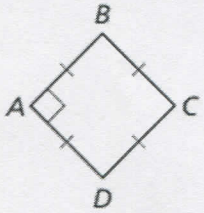
5. **ERROR ANALYSIS** Describe and correct the error in finding m∠A.

∠B ≅ ∠D

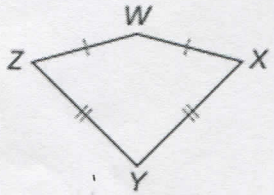
m∠A = 70°



Give the most specific name for the quadrilateral. Explain your reasoning.

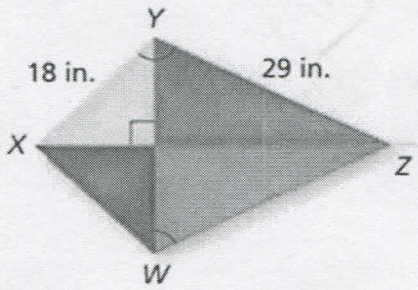
6. 

square; All sides R ≅ & ∠'s R 90°

7. 

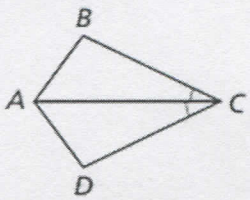
Kite; WXYZ has 2 pairs of consecutive ≅ sides & opp sides R ≇.

8. **PROBLEM SOLVING** You and a friend are building a kite. You need a stick to place from X to W and a stick to place from W to Z to finish constructing the frame. You want the kite to have the geometric shape of a kite. How long does each stick need to be? Explain your reasoning.



18in; 29in
Consecutive sides R ≅.

9. **REASONING** Determine which pairs of segments or angles must be congruent so that you can prove that ABCD is a kite. Explain your reasoning. (There may be more than one right answer.)



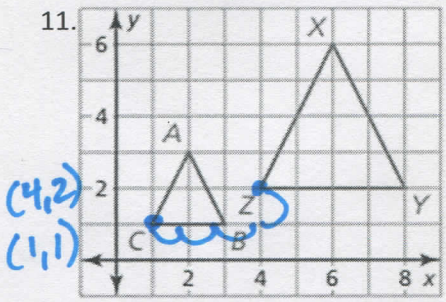
answers will vary.

10. **REASONING** Determine whether the points A(4, 5), B(- 3, 3), C(- 6, - 13), and D(6, - 2) are the vertices of a kite. Explain your reasoning.

yes; $AB = AD = \sqrt{53}$ & $BC = DC = \sqrt{265}$

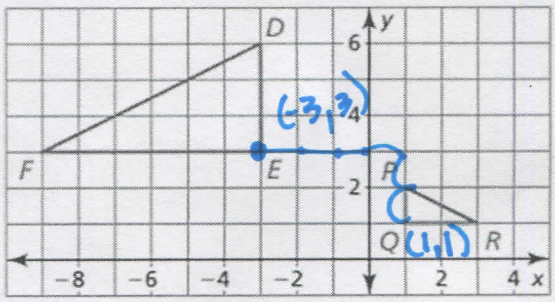
Describe a transformation that maps the left image to the right image.

11.



→3u
up 1u
dilated by (4,2)

12.



R_y; →4u; ↓2u
Reduction $(\frac{1}{3}, \frac{1}{3})$

CYU Reflection: *How far can you go: basic, intermediate, or advanced?*

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.