Name: Key Date: _____ Period: _____

5.1 Angles of Triangles 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

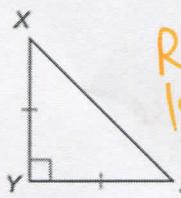
G Use when you completed the problem in a group

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

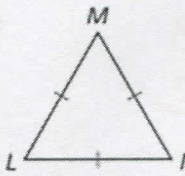
N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Classifying by sides	1		
Classifying by angles	2		
Distance formula		3, 4	
Slope formula	3, 4		
Triangle Sum Theorem	5 - 8	13, 14	15, 16
Exterior angle Theorem		9 - 12	
Spiral Review	17 20	17 - 20	17 - 20

Classify the triangle by its sides and by measuring its angles.

1. 

Right Isosceles

2. 

Equiangular Equilateral

Classify ΔABC by its sides. Then determine if it is a right triangle.

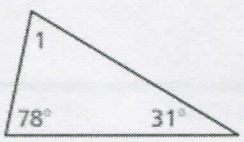
3. A(2, 3); B(6, 3); C(2, 7)

Isosceles Right

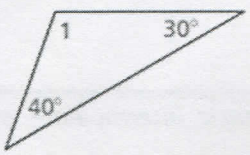
4. A(3, 3); B(6, 9); C(6, - 3)

Isosceles Not Right

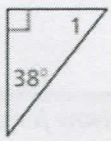
Find m∠1. Then classify the triangle by its angles.

5. 

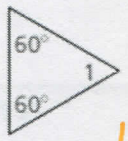
71°; acute

6. 

110°; obtuse

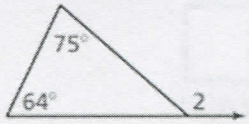
7. 

52°; right

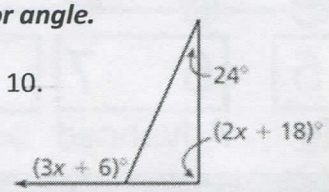
8. 

60°; equiangular

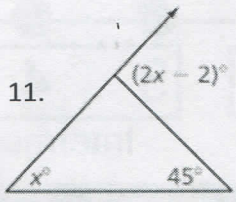
Find the measure of the exterior angle.

9. 

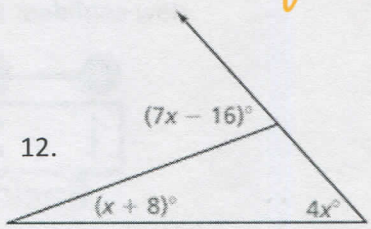
139°

10. 

114°

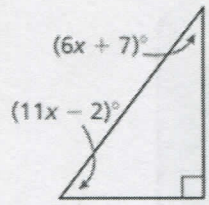
11. 

92°

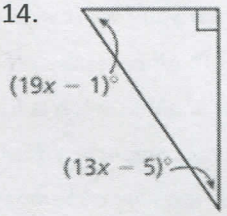
12. 

68°

Find the measure of each acute angle.

13. 

37°; 53°

14. 

34°; 56°

Find the measure of each acute angle in the right triangle.

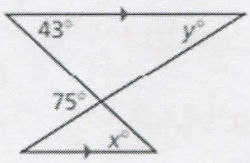
15. The measure of one acute angle is 3 times the sum of the measure of the other acute angle and 8.

16.5°; 73.5°

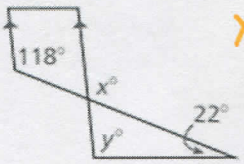
16. The measure of one acute angle is twice the difference of the measure of the other acute angle and 12.

38°; 52°

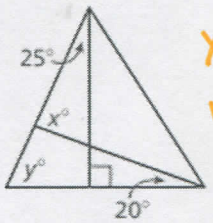
Find the values of x and y.

17. 

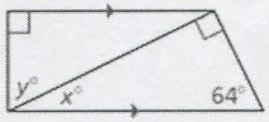
x = 43
y = 32

18. 

x = 118
y = 96

19. 

x = 85
y = 65

20. 

x = 26
y = 64

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.