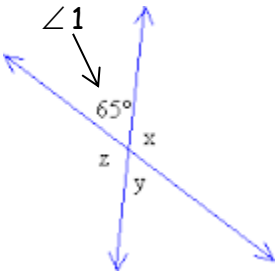
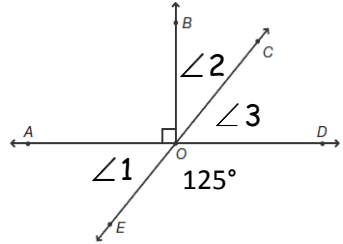
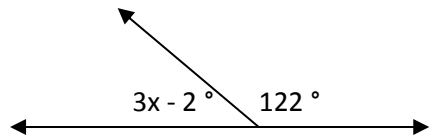


Name: _____ Units: _____ Date: _____
6th Grade CCA Unit 7 Geometry Study Guide: Constructions and Scale Drawings

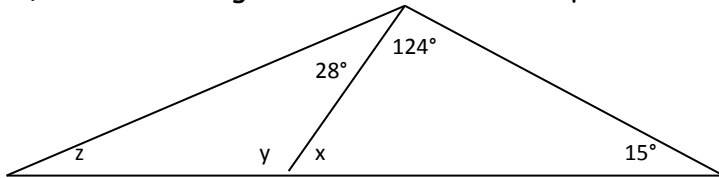
Directions: Carefully read and follow the directions for each section. Remember to SHOW YOUR WORK and write your answers on the lines provided.

<p>3 points LT1</p> <p>Score:</p>	<p>1.) Find the measure of $\angle x$, $\angle y$, and $\angle z$.</p> <p>$\angle x =$ _____ because it is _____ to $\angle 1$</p> <p>$\angle y =$ _____ because it is _____ to $\angle 1$</p> <p>$\angle z =$ _____ because it is _____ to $\angle 1$</p>	
<p>3 points LT1 & 2</p> <p>Score:</p>	<p>2.) Find the measure of $\angle 1$, $\angle 2$, and $\angle 3$.</p> 	<p>$\angle 1 =$ _____</p> <p>$\angle 2 =$ _____</p> <p>$\angle 3 =$ _____</p>
<p>Learning Target #1 Score: Add points from 1-2: _____ /6</p>		
<p>1 point LT2</p> <p>Score:</p>	<p>3.) Write an equation for the situation. Then find the value of x.</p> 	<p>Equation: _____</p> <p>$x =$ _____</p>
<p>2 points LT2</p> <p>Score:</p>	<p>4.) $\angle x$ is complementary to $\angle y$. $\angle x = 53^\circ$ and $\angle y = (2a + 5)$. Write an equation for the situation and then find the value of a and the measure of angle y.</p>	<p>Equation: _____</p> <p>$a =$ _____ (1 pt)</p> <p>$m\angle y =$ _____ (1 pt)</p>
<p>Learning Target #2 Score: Add points from 3-4: _____ /3</p>		

3 points
LT3

Score:

5.) Use the triangle below to answer the questions that follow.



Find the values of x , y , z in the figure above.

$x =$ _____

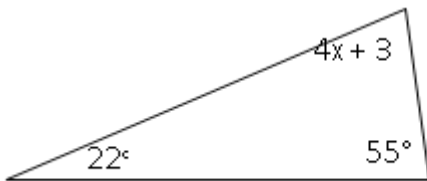
$y =$ _____

$z =$ _____

1 point
LT3

Score:

6.) Write an equation for the situation. Then find the value of x .



Equation: _____

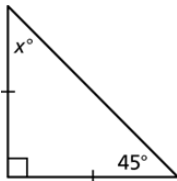
$x =$ _____

3 points
LT3

Score:

Find the value of x . Then classify the triangle by its angles and sides.

7.)



7.) $x =$ _____

Classify by angles = _____

Classify by sides = _____

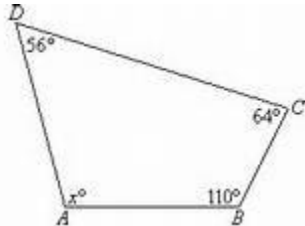
Learning Target #3 Score: Add points from 5-7: _____ /7

1 points
LT4

Score:

Find the value of x .

8.)



8.) _____

1 point LT4 Score:	9.) What is the name of the quadrilateral that has exactly one set of parallel lines? 9.) _____
2 points LT4 Score:	Decide whether each statement is true or false. Then explain your reasoning. 10.) A rhombus can have two 60° angles and two 120° angles. Circle One: True False Explain: 11.) An isosceles triangle can have degree measurements of 70° , 70° , and 50° . Circle One: True False Explain:
Learning Target #4 Score: Add points from 8-11: _____ /4	
1 point LT5 Score:	12.) The scale on a map is 1 in. : 40 mi. The actual distance between two cities is 350 miles. What is the distance between the cities on the map? 12.) _____
5 points LT5 Score:	13.) A scale drawing of a soccer field is 6 inches long and 3 inches wide. The actual field is 300 feet long. 13a.) What is the scale of the drawing? 13a.) _____ 13b.) Find the perimeter and area of the soccer field in the scale drawing. 13b.) Perimeter = _____ Area = _____ 13c.) Find the actual perimeter and area of the soccer field. 13c.) Perimeter = _____ Area = _____

2 Points LT5 Score:	14.) Ryan's scale drawing of his remote control airplane is 6 inches long and 4 inches wide. If every $\frac{1}{2}$ inch of the drawing represents 10 centimeters for his airplane, what is the length and width of his airplane that he is building? <div style="text-align: right;">width = _____</div> <div style="text-align: right;">length = _____</div>
Learning Target #5 Score: Add points from 12-14: _____ /8	

Answer Key:

1.) $\angle x = 115^\circ$: supplementary, $\angle y = 65^\circ$: vertical $\angle z = 115^\circ$: supplementary			
2.) $\angle 1 = 55^\circ$, $\angle 2 = 35^\circ$, $\angle 3 = 55^\circ$		3.) $x = 20$	
4.) $a = 16$; $\angle y = 37^\circ$		5.) $x = 41^\circ$; $y = 139^\circ$; $z = 13^\circ$	
6.) $x = 25$	7.) $x = 45^\circ$; Right; Isosceles		8.) $x = 130^\circ$
9.) Trapezoid	10.) True	11.) False	12.) 8.75 in
13a.) $\frac{1 \text{ inch}}{50 \text{ ft}}$	13b.) $P = 18 \text{ in}$; $A = 18 \text{ in}^2$		
13c.) $P = 900 \text{ ft}$; $A = 45,000 \text{ ft}^2$		14.) $w = 80 \text{ in}$ $L = 120 \text{ in}$	