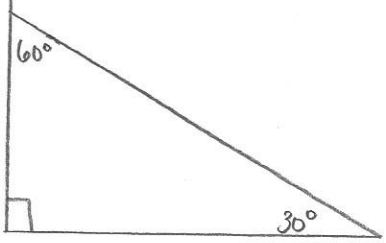
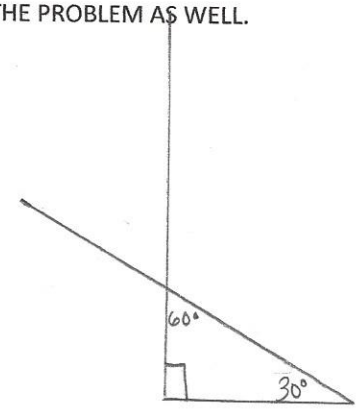
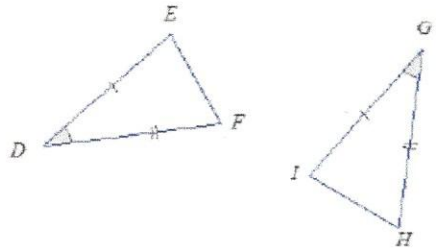
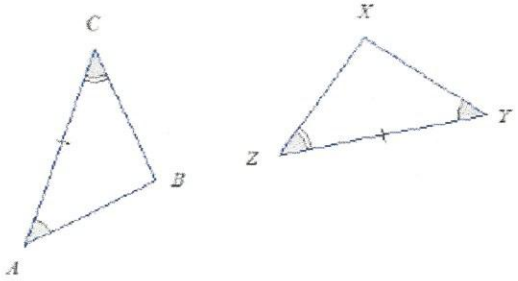
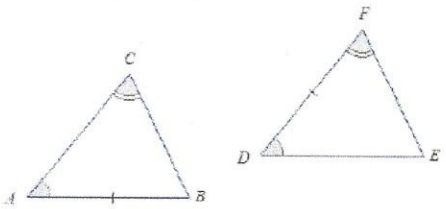
NAME Answer Key DATE _____

CLASS _____ MS. MALDONADO

QUIZ B – GEOMETRY AFTER LESSON 13

PROBLEM	SHOW WORK (if applicable) AND STATE ANSWER HERE	FEED-BACK	SCORE (POINTS EARNED)
1. Show that AAA does not determine a unique triangle. Using a protractor, draw two different triangles with the same angle measurements that are not identical. Use 30°, 60°, and 90° for the angle measurements. 	YOU MAY USE THE SPACE UNDERNEATH THE PROBLEM AS WELL. 	YES NO	**0** points – Blank OR completely incorrect. **1** point – Incomplete but some correct work. **2** points – Complete work but with errors. **3** points – Complete work with no errors.
2. The two triangles below are identical because of ~~AAA~~ SAS. Write the triangle correspondence. 	$\Delta DEF \leftrightarrow \Delta$ GIH	YES NO	**0** points – Incorrect. **2** points – Correct.
3. Based on the information provided in the diagrams, can you tell if the two triangles are identical? Explain your answer. • Determine the set of conditions shown in each triangle. • If they are the same, identify the corresponding vertices. • Check that all of the indicated corresponding angles and sides are equal in measure. 	ASA ASA $A \leftrightarrow Y, B \leftrightarrow X, C \leftrightarrow Z$ $m\angle A = m\angle Y$ $AC = YZ$ $m\angle C = m\angle Z$ Yes. The triangle are identical. They both show ASA and the indicated corresponding angle and side are equal in measure.	YES NO	**0** points – Blank OR completely incorrect. **1** point – Incorrect answer, incomplete but some correct work OR correct answer and no work. **1.5** points – Correct answer, incomplete but some correct work. **2** points – Complete work and answer but with errors. **3** points – Complete work and answer with no errors.

4. Based on the information provided in the diagrams, can you tell if the two triangles are identical? Explain your answer. • Determine the set of conditions shown in each triangle. • If they are the same, identify the corresponding vertices. • Check that all of the indicated corresponding angles and sides are equal in measure.  	AAS ASA No, I cannot tell if the triangle are identical because one triangle shows AAS and the other shows ASA.	YES NO	**0** points – Blank OR completely incorrect. **1** point – Incorrect answer, incomplete but some correct work OR correct answer and no work. **1.5** points – Correct answer, incomplete but some correct work. **2** points – Complete work and answer but with errors. **3** points – Complete work and answer with no errors.
5. Is it possible to draw a triangle with angle measurements 25°, 55°, and 105°? Explain your answer without drawing a triangle.	25+55+105=185 No, it is not possible. The sum of the interior angles of a triangle must be 180°.	YES NO	**0** points – Blank OR completely incorrect. **1** point – Incorrect answer, incomplete but some correct work OR correct answer and no work. **1.5** points – Correct answer, incomplete but some correct work. **2** points – Complete work and answer but with errors. **3** points – Complete work and answer with no errors.
6. Is it possible to construct a triangle with the following three side lengths: 4 cm, 5 cm and 11 cm ? Explain your answer without drawing.	$11+5 \overset{?}{>} 4 \overset{?}{>} 11-5$ $16 > 4 > 6$ NOT TRUE No, it is not possible because one of the side is not greater than the difference of the other two side.	YES NO	**0** points – Blank OR completely incorrect. **1** point – Incorrect answer, incomplete but some correct work OR correct answer and no work. **1.5** points – Correct answer, incomplete but some correct work. **2** points – Complete work and answer but with errors. **3** points – Complete work and answer with no errors.
		TOTAL POINTS EARNED (TPE)	17 + 3 bonus
		TOTAL POSSIBLE POINTS (TPP)	20
		QUIZ GRADE (AS A PERCENT)	100 %