

EAST PRESTON ISLAMIC COLLEGE

Holiday Homework-Term 1

DUE: Monday, Second week of Term 2, 2019

Major Assessment Task: Year 9 Mathematics

Name: _____

Have a safe and wonderful time on your Holidays!!!!

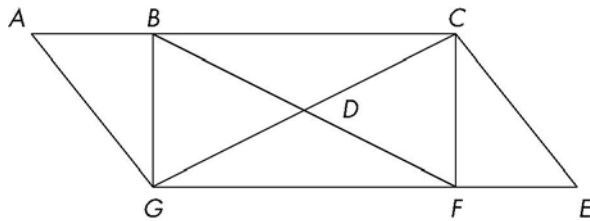
From your Year 9 Maths Teachers.

Ms. Duoaa Taleb, Mr. Waseemur Rahman & Mr. Emad Mehanni

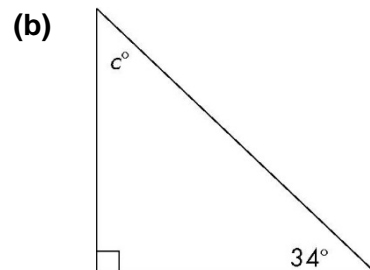
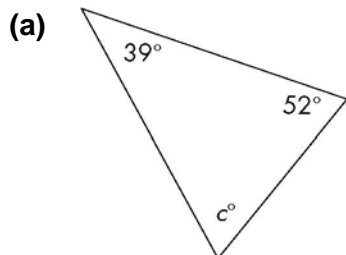
Task Title: Application of Geometry

Skills

- 1 In the following diagram, find and name all the different triangles and quadrilaterals.

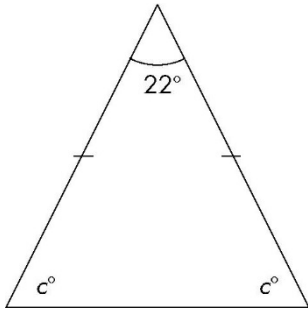


- 2 Find the value of the pronumeral in each of the following diagrams.

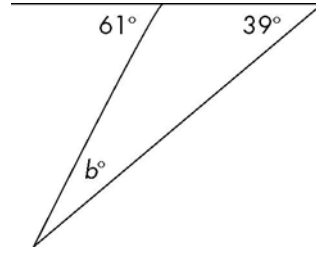


3 Find the value of the pronumeral in each of the following diagrams.

(a)

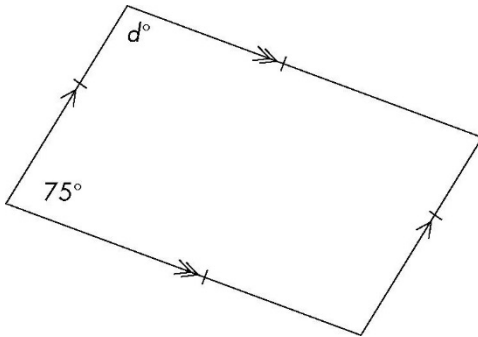


(b)

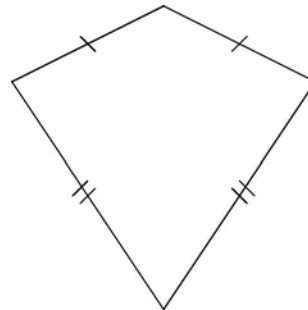


4 What is the most appropriate name for each of the following quadrilaterals?

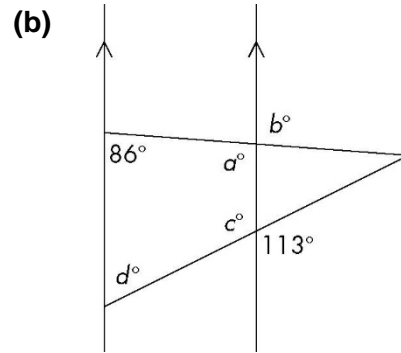
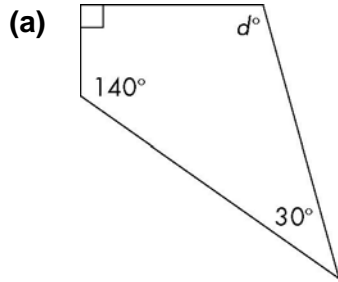
(a)



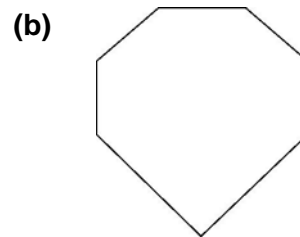
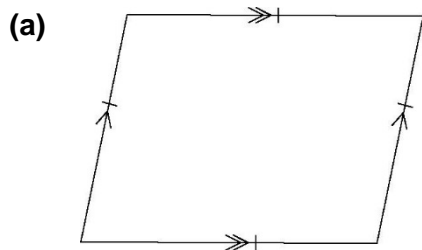
(b)



5 Find the value of the pronumeral in each of the following diagrams.

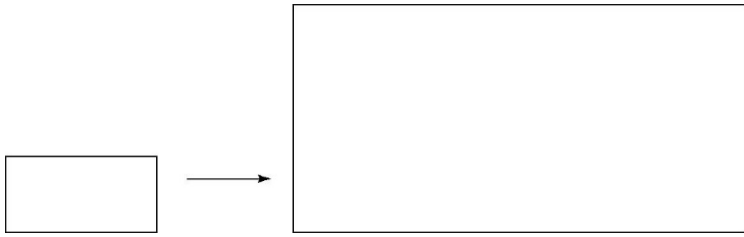


6 Test the following shapes to see if they will produce regular tessellations.



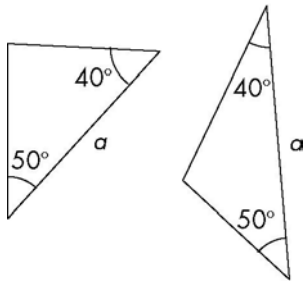
7 Carefully and accurately construct an isosceles triangle.

8 What is the scale factor in the following diagram?

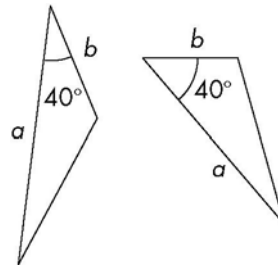


9 Give reasons why each of the following pairs of triangles are congruent.

(a)

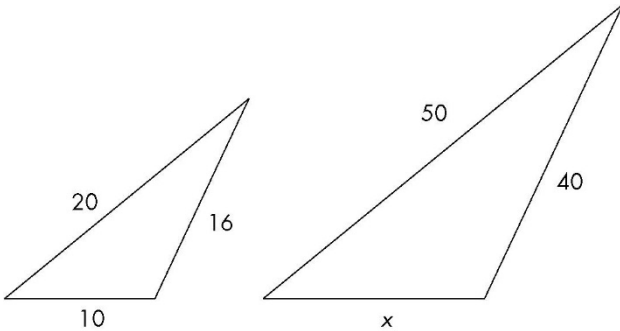


(b)

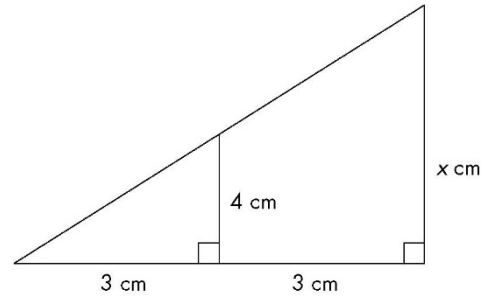


10 Find the value of the pronumeral in each of the following pairs of similar triangles.

(a)

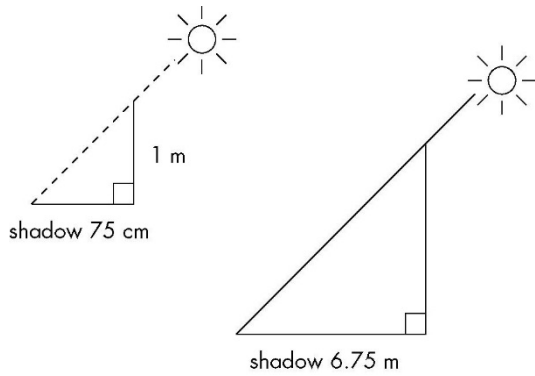


(b)



Applications

- 11** Gloria wants to measure the height of a large gum tree. Using similar triangles, she measures the length of the shadow cast by a 1 m ruler along with the shadow cast by the tree itself. How tall is the tree?



Performance Standards/ Marking Criteria

Performance Standards for Year 9 Mathematics

	Mathematical knowledge & skills & their application (MKSA)	Mathematical modeling and problem-solving (MMPS)	Communication of mathematical information (CMI)
A	<ul style="list-style-type: none"> • Extensive knowledge of content and understanding of concepts. • Appropriate selection and use of mathematical ideas and processes efficient in solving complex problems with and without technology. • Highly effective and accurate application of knowledge and skills in different contexts. 	<ul style="list-style-type: none"> • Complete analysis of the tasks using a variety of methods to investigate, model, and interpret. • Highly effective use of a range of problem solving strategies to solve complex problems. • Complete understanding of the reasonableness and possible limitation of the results, and recognition of possible extensions. • Constructive and productive contribution to the work of the group. 	<ul style="list-style-type: none"> • Complete, coherent, and concise solutions and mathematical arguments communicated clearly and accurately, and logically organized. • Proficient use of correct notation, representations and terminology.
B	<ul style="list-style-type: none"> • Considerable knowledge of content and understanding of concepts. • Selection and use of mathematical ideas and processes that produced some correct results for complex problems with and without technology. • Effective and accurate application of knowledge and skills in different contexts. 	<ul style="list-style-type: none"> • Accurate analysis of the tasks using a variety of methods to investigate, model, and interpret. • Effective use of problem-solving strategies to solve complex problems. • Understanding of the reasonableness and possible limitation of the results, or recognition of possible extensions. • Productive contribution to the work of the group. 	<ul style="list-style-type: none"> • Solutions and mathematical arguments clearly and accurately communicated. • Appropriate use of correct notation, representations, and terminology.
C	<ul style="list-style-type: none"> • Adequate knowledge of content and understanding of concepts. • Use of mathematical ideas and processes that produced correct results for routine problems with and without technology. • Some application of knowledge and skills in different contexts. 	<ul style="list-style-type: none"> • Competent analysis of the tasks using a variety of methods to investigate, model, and interpret. • Mostly effective use of problem-solving strategies to solve problems. • Some understanding of the reasonableness and possible limitation of the results. • Adequate contribution to the work of the group. 	<ul style="list-style-type: none"> • Competent communication of solutions and mathematical arguments. • Adequate use of COIT8Ct notation, representations, and terminology.
D	<ul style="list-style-type: none"> • Some knowledge of aspects of the content and understanding of a limited range of concepts. • Use of mathematical ideas and processes that produced some correct results for routine problems with and without technology. • Application of knowledge and skills in different contexts with partial effectiveness. 	<ul style="list-style-type: none"> • Some analysis of aspects of the tasks using a variety of methods to investigate, model, and interpret. • Occasional use of problem-solving strategies to solve problems. • Some awareness of the reasonableness and possible limitation of the results. • Superficial contribution to the work of the group. 	<ul style="list-style-type: none"> • Communication of solutions and mathematical arguments with some effectiveness. • Some attempt to use correct notation, representations, and terminology.
E	<ul style="list-style-type: none"> • Limited knowledge of aspects of the content and some awareness of one or more concepts. • Use of mathematical ideas and processes that produced limited correct results for routine problems with and without technology. • Application of knowledge and skills in a different context with limited effectiveness. 	<ul style="list-style-type: none"> • Attempted analysis of one or more aspects of the tasks using a variety of methods to investigate, model, and interpret. • limited use of problem-solving strategies to solve problems. • Limited awareness of the reasonableness and possible limitation of the results. 	<ul style="list-style-type: none"> • Limited communication of solutions or mathematical arguments. • Limited attempt to use correct notation, representations, and terminology.