ALBERTA DISTANCE LEARNING CENTRE

Mathematics 10-3

MAT1793

Course Review 2

Chapters 5 – 8

Student's Questions and Comments

FOR STUDENT USE ONLY

Student Name:

_____

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Assigned to

_____

Marked by

_____

Date received

_____

Summary

	Marks Earned	Total Possible Marks	Percent
Chapter 5		15	
Chapter 6		22	
Chapter 7		36	
Chapter 8		21	
Course Review 2 Average			

Teacher's Comments:

_____

Teacher's Signature

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Course Review 2

You must complete and submit this review for marking. In this review there are no multiple-choice questions. There will not be multiple-choice questions on the final exam. Always show work for all steps/thought as you work. If you encounter problems as you are working through this review, please contact your teacher for help.

Chapter 5: SI and Imperial Systems

(4) 1. State which Imperial and SI units would be appropriate to measure the following.

Item	SI measure	Imperial measure
the height of a flagpole		
area of the exterior walls of a house		
amount of water in a water bottle		
volume of a grocery bag		

(2) 2. Shane is 5 ft 10 in tall. How many centimetres tall is Shane? Round to the nearest centimetre.

(1) 3. How many centimetres are in 0.65 km?

(2) 4. How many pounds are in 50 ounces?

(2) 5. How many US gallons of gasoline are in 85 litres. Round your answer to the nearest gallon.

(2) 6. How many metres tall is a 28 foot power pole?

(2) 7. A news report states that temperatures are near 120 degrees Fahrenheit in the southern United States. How warm is it in degrees Celsius? Round to the nearest degree.

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Chapter 6: Lines and Angles

(5) 1. Matching: Place the correct letter beside the appropriate definition.

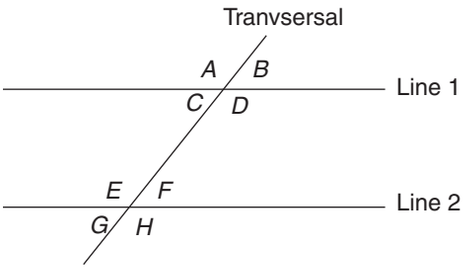
a.	parallel lines	_____	Lines that cross each other at exactly 90°.
b.	perpendicular lines	_____	Two angles sitting next to each other.
c.	vertically opposite angles	_____	Two angle measures that add to 90°.
d.	adjacent angles	_____	A line that cuts across two or more lines.
e.	supplementary angles	_____	Two angle measures that add to 180°.
f.	complementary angles	_____	A pair of angles on the same side of a transversal and on the same sides of two parallel lines.
g.	transversal	_____	A line crosses another line creating two angles that are opposite each and equal in measure.
h.	corresponding angles	_____	Lines that never cross.
i.	alternate exterior angles	_____	A pair of angles on opposite sides of the transversal and on the insides of the parallel lines.
j.	alternate interior angles	_____	A pair of angles on opposite sides of the transversal and on the outsides of the parallel lines.

(3) 2. Matching: Place the correct letter beside the appropriate definition.

a.	acute angle	_____	An angle that measures more than 180° and less than 360°.
b.	obtuse angle	_____	An angle that measures 90°.
c.	straight angle	_____	An angle measuring half its original measure.
d.	bisected angle	_____	An angle that measures more than 90° and less than 180°.
e.	reflex angle	_____	An angle smaller than 90°.
f.	right angle	_____	An angle that measures 180°.

Use the following diagram to answer questions 3 to 10.

A transversal passes through parallel lines 1 and 2. The result is the diagram shown



(0.5) 3. Name one pair of corresponding angles

(0.5) 4. Name one pair of vertically opposite angles

(0.5) 5. Name one pair of alternate interior angles

(0.5) 6. Name one pair of alternate exterior angles

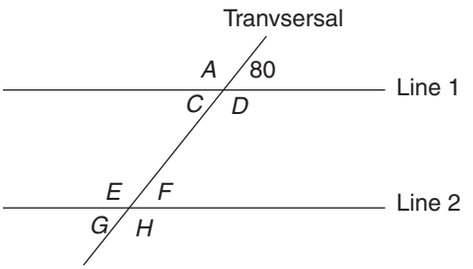
(0.5) 7. Name one pair of adjacent supplementary angles

(0.5) 8. State one obtuse angle

(0.5) 9. State one acute angle

(0.5) 10. Name two angles that form a straight angle.

Use the following diagram to answers questions 11 to 13



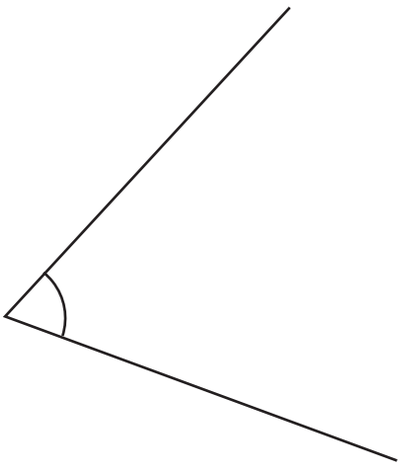
(1) 11. State two angles that are equal to $80°$.

(1) 12. What is the measure of $\angle E$?

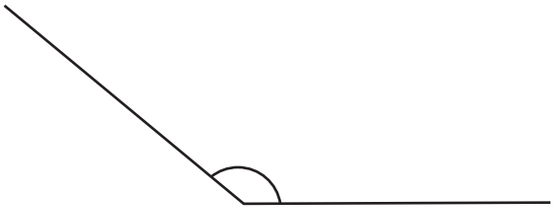
(1) 13. What is the measure of $\angle F$?

(1) 14. If an angle measures $40°$, its complement measures _____, and its supplement measures _____.

(3) 15. Bisect the given angle using a compass and ruler.



(3) 16. Replicate the given angle using a compass and ruler.



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Chapter 7: 2-D Shapes and 3-D Objects

(2) 1. Name two referents you could use to measure each of the following.

length of a car:

a.

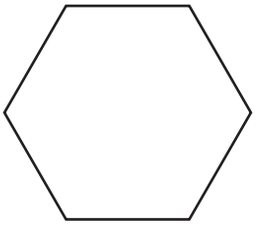
b.

height of a grade one student:

a.

b.

(2) 2. What is the perimeter of this shape if each side is 7 cm long?



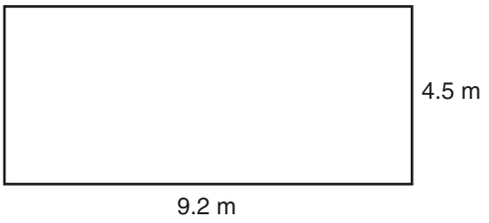
(2) 3. What is the circumference of a silo that has a diameter of 5.5 metres. Round your answer to 1 decimal place.

(6) 4. Monica is decorating a rectangular gymnasium for a winter themed school dance with a border around the entire gym above the door height. She has packages of border paper that costs $6.99 per 15 ft. How much will it cost for the border paper if the gym is 27 m long and 15 m wide?

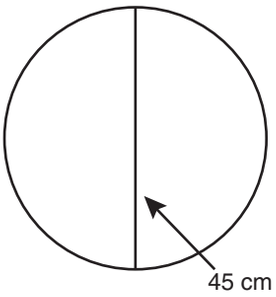
(1) 5. Name two area referents that you could use to measure the size of the lawn in a backyard.

6. Find the area of the following shapes. Show the formula used and all work. Round your answer to 1 decimal place.

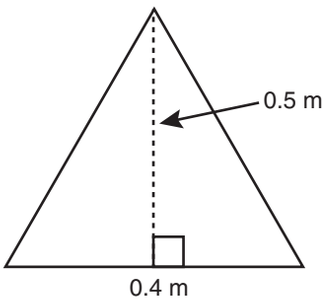
(2) a.



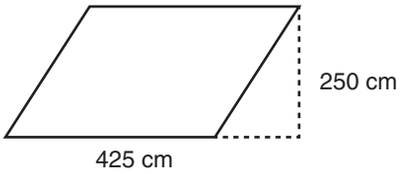
(2) b.



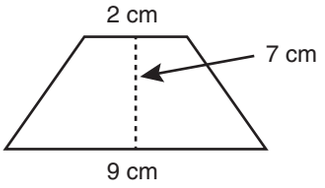
(2) c.



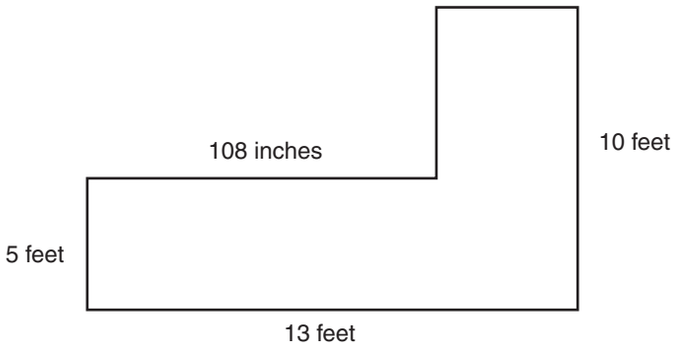
(2) d.



(2) e.



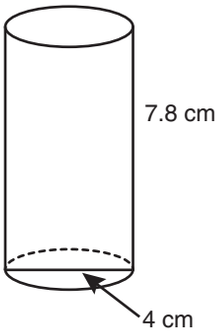
(5) 7. a. Determine the area of the shape in square feet.



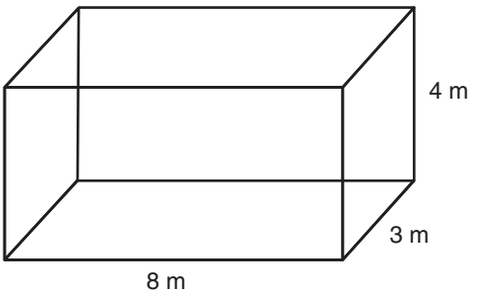
(2) b. What is the area of the shape in square meters?

8. Determine the surface area for each of the following 3-D objects

(3) a. cylinder



(3) b. rectangular prism



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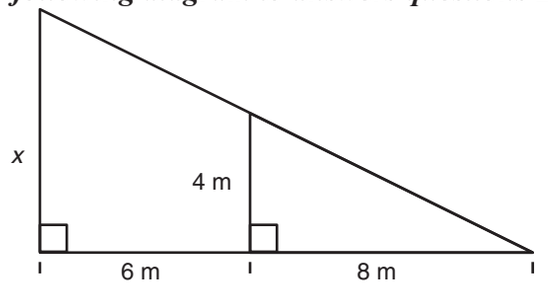
Chapter 8: Similar Polygons

(5) 1. Matching: Place the correct letter beside the appropriate definition.

a.	proportional	_____	A triangle where one angle measures more than 90°.
b.	congruent triangles	_____	Two triangles that are the same shape but different sizes.
c.	similar triangles	_____	A polygon where all sides are equal in measure.
d.	acute triangle	_____	Two triangles that are exactly the same size and shape.
e.	obtuse triangle	_____	A triangle where all angles are less than 90°.
f.	equilateral triangle	_____	A triangle where all sides and all angles are equal in measure.
g.	isosceles triangles	_____	A triangle where one angle is 90°.
h.	right triangle	_____	A polygon where all sides are not equal in measure.
i.	regular polygons	_____	A triangle where two sides and two angles are equal in measure.
j.	irregular polygons	_____	When dimensions are multiplied or divided by a value so the resulting objects have the same shape but different sizes.

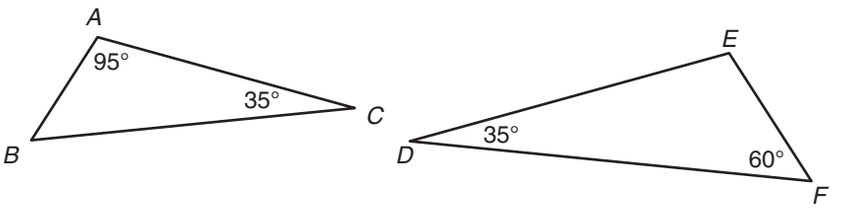
Use the following diagram to answers questions 2 and 3.



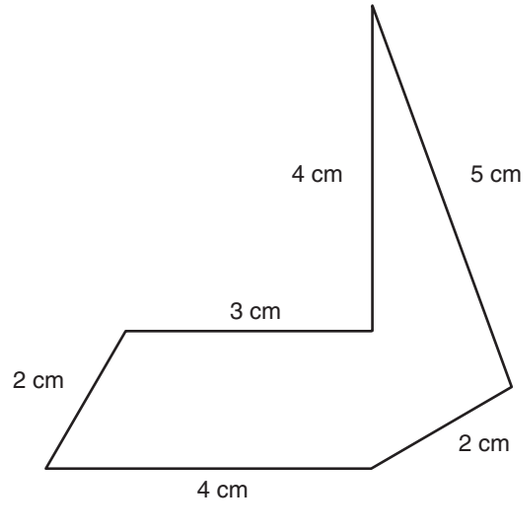
(2) 2. Draw the two triangles in the diagram and label the measure of the known sides.

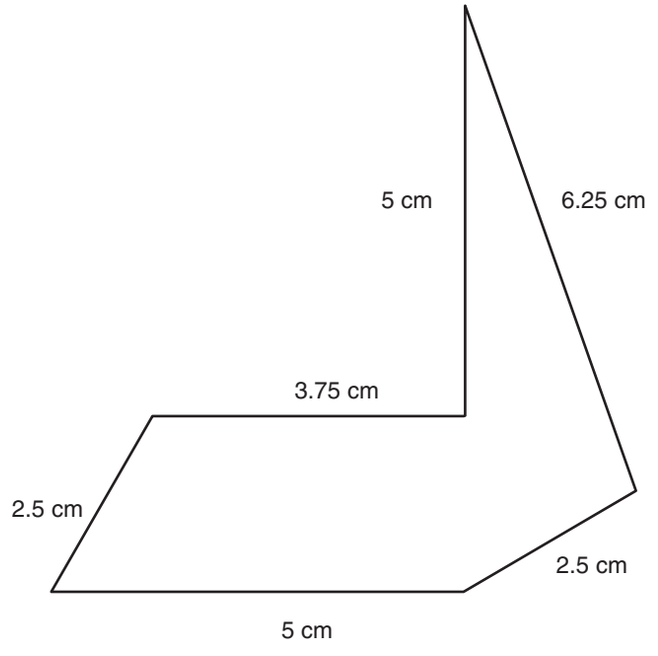
(1) 3. Set up an equation, using ratios, to find the value of x.

(3) 4. Are triangles ABC and DEF similar? Explain.

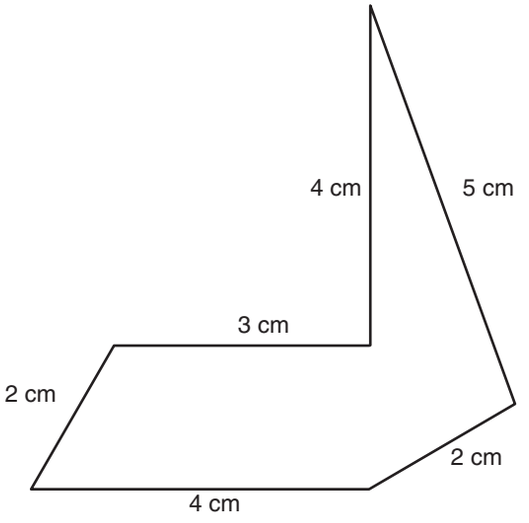


(5) 5. Using **corresponding side length ratios and angles**, determine if the polygons shown are similar? (**Hint**: Label vertices as a first step.)





(5) 6. Draw an enlargement of the following polygon by a factor of 2. Remember to label angle measures and scaled side lengths on the enlarged drawing.



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