ALBERTA DISTANCE LEARNING CENTRE
Mathematics 10C

MAT1791

Unit 2 Final Review Workbook

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Apply Workbook Label Here

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Assigned to

Marked by

Date received

Summary

	Marks Earned	Total Possible Marks	Percent
Unit 2 Final Review Assignment		33	

Teacher's Comments:

_____
Teacher's Signature

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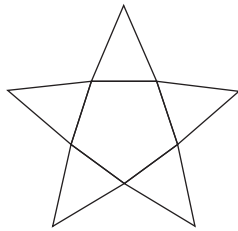
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Mathematics 10C

Unit 2
Final Review Workbook
Surface Area and Volume

Unit 2: Surface Area and Volume Final Review Assignment

⚓ **Final Review Assignment**

① 1. a. What is the specific name for the right pyramid that can be produced from the net shown?

② b. Sketch the three-dimensional right pyramid represented in the net above, and label it with the following measurements: slant height of 5 cm and base length of 3 cm.

2. Dustin wants to build a storage box with the following dimensions: 12 inches by 2.25 ft by $\frac{1}{3}$ yd.

② a. Sketch and label a suitable diagram.

(2)   b. What imperial unit do you recommend he use? Explain why.

_____

_____

_____

_____

(4)   c. Determine both the surface area (in square feet) and the volume (in cubic feet) of the proposed storage box.

3.   A cube has a volume of 512 cm^3.

(2)   a. Determine is side length.

(1)   b. What real life object could this cube represent?

_____

_____

(2)   c. Embedded within the cube is a sphere whose diameter is the same as the length of the cube. Determine the volume of the sphere.

(1)   d. What real life object could this sphere represent?

_____

_____

4. A right cone has a height of 14 in and a base diameter of 17 in.

(2)   a. Sketch and label a diagram of the cone.

(4)   b. Determine the area of the lateral surface of the cone, to the nearest square inch.

(4)   5.   A specialty candy shop makes chocolate covered cherry and graham cookie bites. The cherry
is spherical with a diameter of 3 cm and the graham cookie is a rectangular prism with a base
measuring 4 cm by 4 cm and a thickness of 0.5 cm. What is the total surface area of the bite if
each piece is drenched in chocolate from top to bottom before being put together, to the nearest
tenth of a square centimetre?
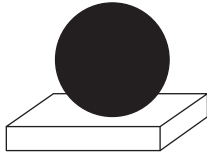
⑥ 6. What is the volume of water, to the nearest tenth of a cubic metre, that would fill this spa tub?

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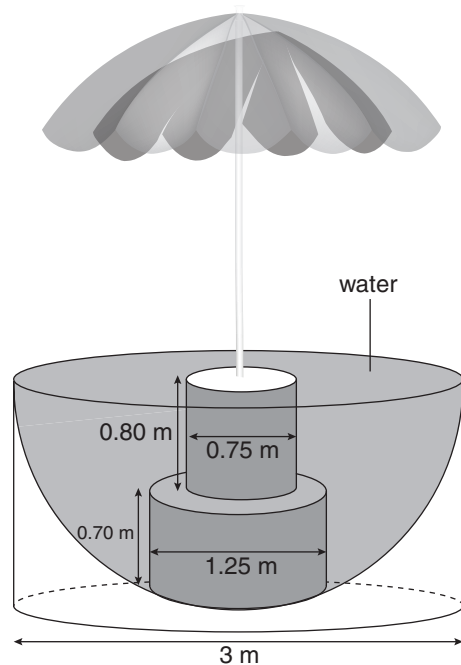
Unit 2: Surface Area and Volume

🔔 Unit Checkpoint

Use the *Check Point* to check and reflect before completing the *Test Your Understanding Quiz* for *Unit 2: Surface Area and Volume*.

I understand how to:

Unit 2 Concepts	Place a checkmark in the appropriate column		
	Yes	**No**	**Maybe**
Find the surface area of right prisms, right cylinders, right cones, right pyramids, and spheres.			
Determine a missing dimension of a right prism, right cylinder, right cone, right pyramid, or sphere, given the surface area and the remaining dimensions.			
Find the volume of right prisms, right cylinders, right cones, right pyramids, and spheres.			
Determine a missing dimension of a right prism, right cylinder, right cone, right pyramid, or sphere, given the volume and the remaining dimensions.			
Solve problems involving composite objects.			

If you have any concerns from the *Check Point*, please refer to *Enhance Your Understanding* in the *Module* for designated practice questions and their solutions to help you improve your skills.

Contact your teacher for assistance and clarification as needed.

You have completed the *Lessons* and *Workbooks* for *Unit 2: Surface Area and Volume*. Please review all work in *Unit 2 Final Review Workbook* to ensure it is your best work. Submit *Unit 2 Final Review Workbook* for marking at this time and continue your training with the next unit, *Unit 3: Trigonometry*.

Complete the *Test Your Understanding Quiz* when you have reviewed the feedback provided by your marker for *Workbooks 2.1, 2.2, 2.3, and Unit 2 Final Review.*

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