

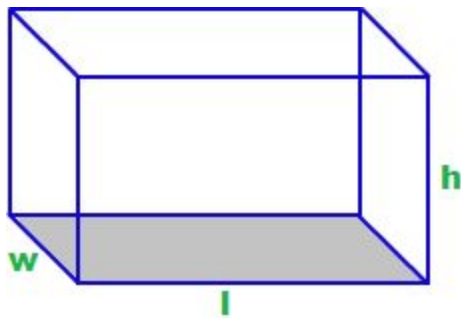
# Volumes of Cylinders and Triangular Prisms

Name: \_\_\_\_\_ Date: \_\_\_\_\_

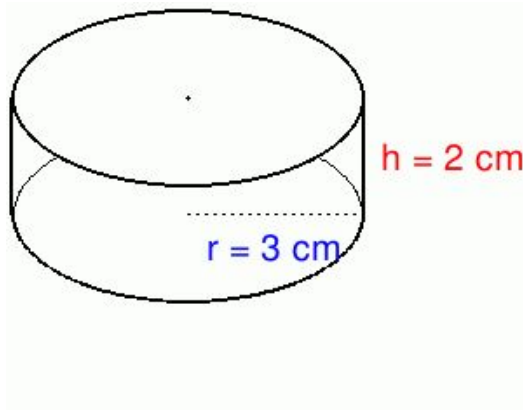
Some things to keep in mind:

- 1) When we use a capital **B** we mean *area of the base*.
- 2) When we use a lowercase **b** we mean the length of the base of a triangle.
- 3) All your units must be correct: units for length, square units for area, and cubic units for volume.
- 4) You can totally do this, so stop freakin' out!

1) So you know how to find the volume of a rectangular prism. Go ahead and tell me how you do that.

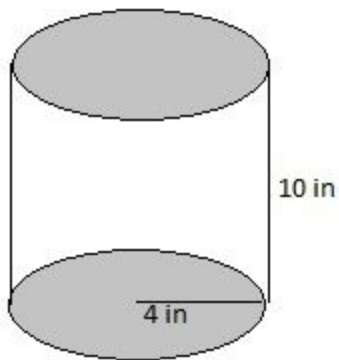


2) Now you're going to use what you know about finding the volume of rectangular prisms and apply it to a Cylinder. How would you find the volume of this cylinder? Please use a combination of math and writing to explain.

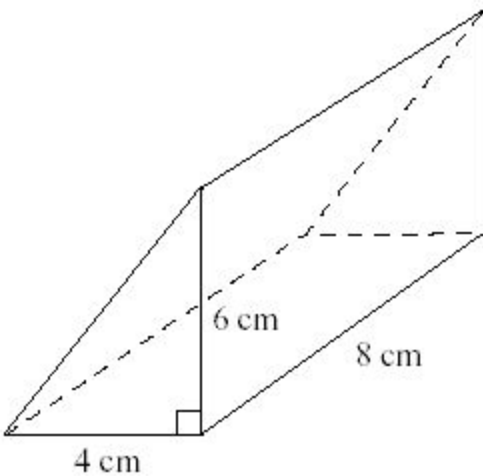


3) Write a formula for finding the volume of a cylinder.

4) The volume of the cylinder below is about  $502.4 \text{ cm}^3$ . Use this to test your formula. Does it work? If not, revise it. You may use a calculator for this section, but must show your work.

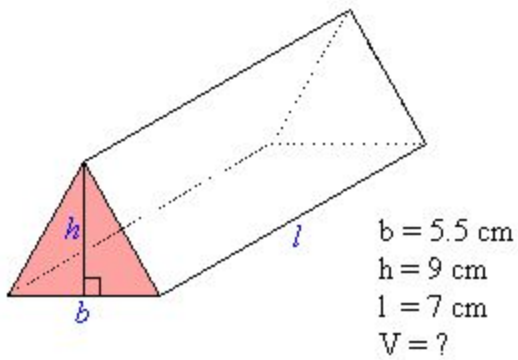


5) Now, apply what you know to a new situation. How would you find the volume of this triangular prism? Use a combination of math and writing to explain.



6) Write a formula for the volume of a triangular prism.

7) The volume of this triangular prism is  $173.25 \text{ cm}^3$ . Use this to test your formula. Does it work? If not, revise it. You should use a calculator for this section, but must show your work.



8) How are all the formulas for volume the same?

# Year 1 **CRITERION B**: Investigating Patterns

Assessment:

Name:

	Criterion B i	Criterion B ii	Criterion B iii
level	The student...	The student...	The student...
0	<b>Does not</b> reach a standard described by any of the descriptors below.	<b>Does not</b> reach a standard described by any of the descriptors below.	<b>Does not</b> reach a standard described by any of the descriptors below.
1-2	<b>applies, with teacher support</b> , mathematical problem solving techniques to recognize <b>simple patterns</b> .	<b>states</b> predictions consistent with simple patterns.	
3-4	<b>applies</b> mathematical problem solving techniques to recognize <b>patterns</b> .	<b>suggests</b> how these patterns work.	
5-6	<b>applies</b> mathematical problem solving techniques to recognize <b>patterns</b> .	<b>suggests</b> relationships or general rules consistent with these findings.	verifies whether patterns work for <b>another example</b> .
7-8	<b>selects</b> and <b>applies</b> mathematical problem solving techniques to recognize <b>correct patterns</b> .	<b>describes patterns of relationships</b> or general rules consistent with <b>correct findings</b> .	verifies whether patterns work for <b>other examples</b> .

Achievement level: \_\_\_\_\_/8