Enhanced End of Topic Assessment

Name _____ Date _____

Part A: Multiple-Choice Questions

1. A rectangle has an area of 90 square centimeters and a height of 12.5 centimeters. What is the length of the base in centimeters?

a. 7.2 cm

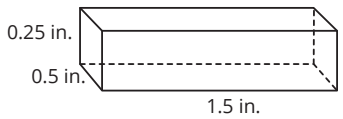
b. 72 cm

c. 112.5 cm

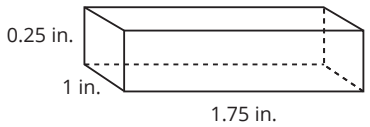
d. 1125 cm

2. Gary is comparing four geometric solids. Which solid has the greatest volume in cubic inches?

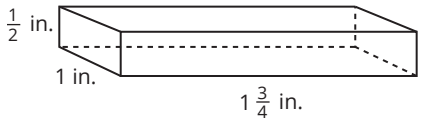
a.



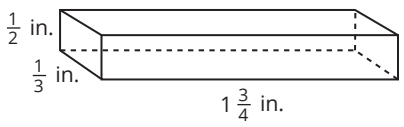
b.



c.



d.



3. The volume of one serving of fruit punch is 3.5 fluid ounces. How many servings are there in 29.75 fluid ounces of fruit punch?

a. 8.25 servings

b. 8.5 servings

c. 9.25 servings

d. 9.5 servings

4. Which equation can be used to calculate the volume of a cube that measures 0.5 cm on each side?

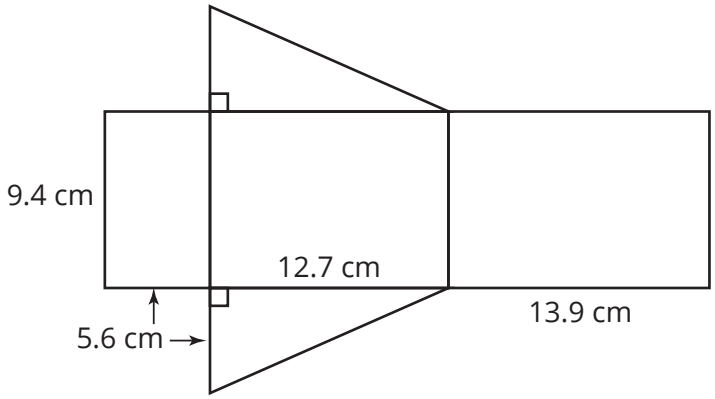
a. $V = (0.5 \text{ cm})(0.5 \text{ cm})(0.5 \text{ cm})$

b. $V = 3(0.5 \text{ cm})$

c. $V = (0.5 \text{ cm})(0.5 \text{ cm})$

d. $V = (0.5 \text{ cm}) + (0.5 \text{ cm}) + (0.5 \text{ cm}) + (0.5 \text{ cm}) + (0.5 \text{ cm}) + (0.5 \text{ cm})$

5. What is the surface area of the solid figure represented by the net?



a. 338.24 cm^2

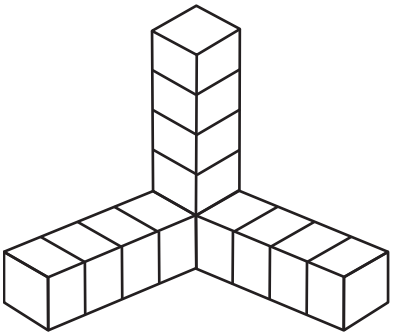
b. 373.80 cm^2

c. 444.92 cm^2

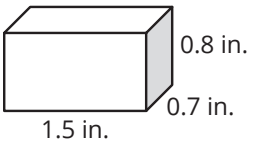
d. 747.6 cm^2

Part B: Open-Response Questions

6. Dante was stacking unit cubes with side lengths of $\frac{1}{8}$ inch to make a larger cube, but he did not have time to finish. If he used the given length, width, and height of the stack so far, what will be the volume of Dante's cube when it is finished?

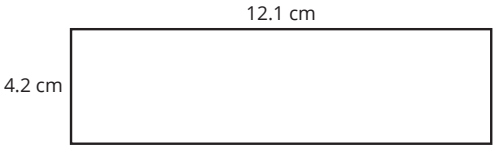


7. Calculate the volume of the rectangular prism.



8. At a marathon, Mark is filling each cup with 6.5 fluid ounces of water for the runners. If Mark is pouring the water into the cups from a water cooler that holds 1280.5 fluid ounces of water, how many cups can Mark fill?

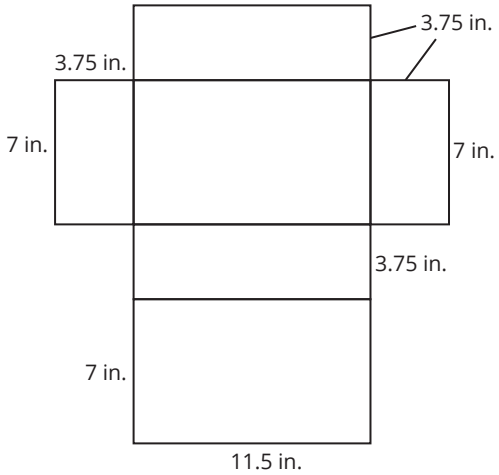
9. The rectangle shown represents the base of a rectangular prism.



a. If h represents the height of the prism, write an equation that can be used to calculate the volume of the prism.

b. If the height of the prism is 3.4 centimeters, use your equation to determine the volume of the prism.

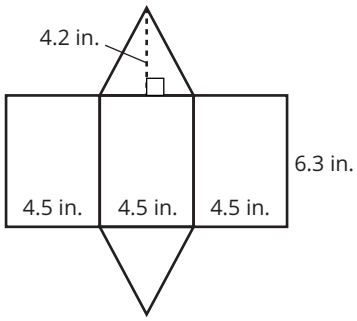
10. Consider the net for the shoe box.



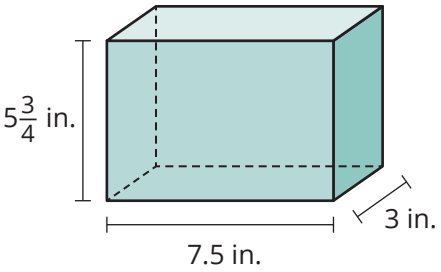
Calculate the surface area of the shoe box.

11. David is making a model of a triangular prism.

Calculate the surface area of the prism.



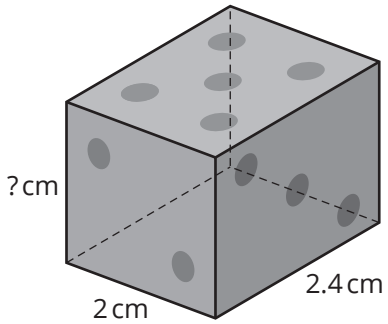
12. Calculate the volume of the right rectangular prism. Round your answer to the nearest hundredth, if necessary.



Part C: Griddable Response Questions

Record your answers and fill in the bubbles. Be sure to use the correct place value.

13. If the volume of the die is 10.08 cubic centimeters, determine the unknown dimension of the die.



					.		
+	0	0	0	0		0	0
−	1	1	1	1		1	1
	2	2	2	2		2	2
	3	3	3	3		3	3
	4	4	4	4		4	4
	5	5	5	5		5	5
	6	6	6	6		6	6
	7	7	7	7		7	7
	8	8	8	8		8	8
	9	9	9	9		9	9

14. The surface area of a cube is 19.44 square centimeters. What is the area of one face of the cube?

					.		
+	0	0	0	0		0	0
−	1	1	1	1		1	1
	2	2	2	2		2	2
	3	3	3	3		3	3
	4	4	4	4		4	4
	5	5	5	5		5	5
	6	6	6	6		6	6
	7	7	7	7		7	7
	8	8	8	8		8	8
	9	9	9	9		9	9

15. Calculate the quotient.

19.4 ÷ 0.8

					.		
+	0	0	0	0		0	0
−	1	1	1	1		1	1
	2	2	2	2		2	2
	3	3	3	3		3	3
	4	4	4	4		4	4
	5	5	5	5		5	5
	6	6	6	6		6	6
	7	7	7	7		7	7
	8	8	8	8		8	8
	9	9	9	9		9	9