

Enhanced End of Topic Assessment

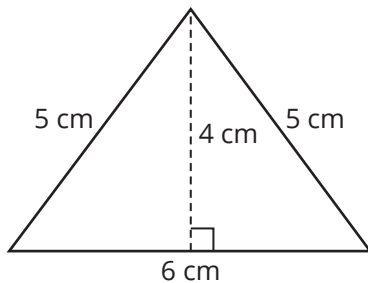
Name _____ Date _____

Part A: Multiple-Choice Questions

1. Which set of measures **CANNOT** be angle measures of a triangle?

- a. $55^\circ, 55^\circ, 71^\circ$
- b. $2^\circ, 2^\circ, 176^\circ$
- c. $11.9^\circ, 19.1^\circ, 149^\circ$
- d. $58^\circ, 63^\circ, 59^\circ$

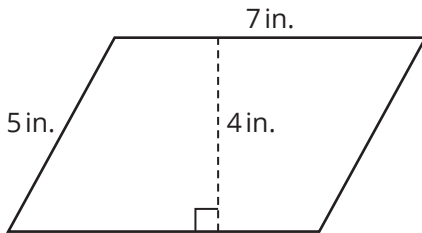
2. Ms. Chung will paint a triangular tile. An image of the tile is shown.



Which equation can be used to calculate the area of the triangular tile?

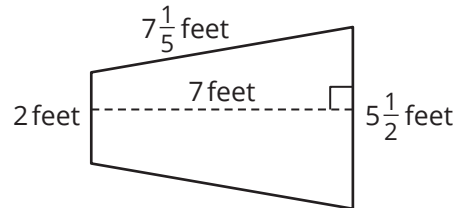
- a. $A = (6 \text{ cm})(4 \text{ cm})$
- b. $A = (6 \text{ cm})(5 \text{ cm})$
- c. $A = \frac{1}{2}(6 \text{ cm})(4 \text{ cm})$
- d. $A = \frac{1}{2}(6 \text{ cm})(5 \text{ cm})$

3. The dimensions of the parallelogram shown are given in inches. What is the area of the parallelogram in square inches?



- a. 28 in.^2
- b. 35 in.^2
- c. 24 in.^2
- d. 20 in.^2

4. The planning committee submitted a plan to the town architect to revitalize the town square. Their plan includes a new flagpole with a concrete base in the shape of an isosceles trapezoid. The base of the trapezoid and its dimensions are shown.

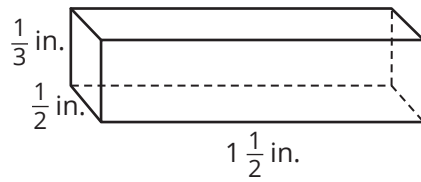


What is the area of the concrete base proposed by the planning committee in square feet?

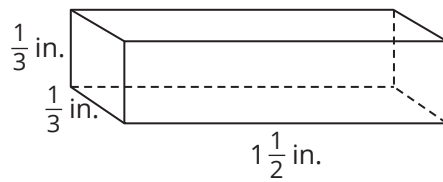
- a. $14 \frac{1}{2} \text{ ft}^2$
- b. $26 \frac{1}{4} \text{ ft}^2$
- c. $26 \frac{1}{2} \text{ ft}^2$
- d. $26 \frac{3}{4} \text{ ft}^2$

5. Gary is comparing four geometric solids. Which solid has the greatest volume?

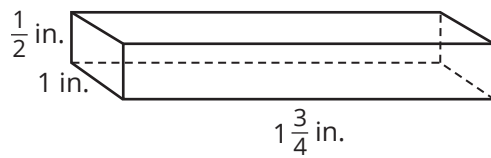
a.



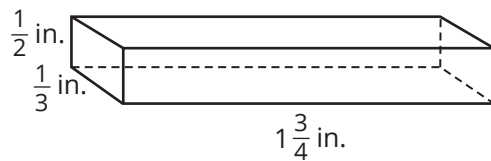
b.



c.



d.

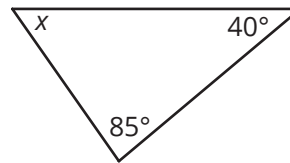


Part B: Open-Response Questions

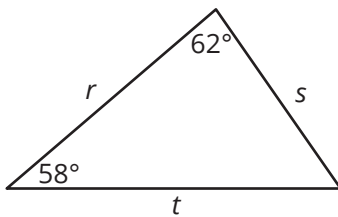
6. Determine whether it is possible to form one unique triangle, many different triangles, or no triangles using the set of segments with the given measurements. Explain your reasoning.

11 in., 8 in., 16 in.

7. What is the value of x ?

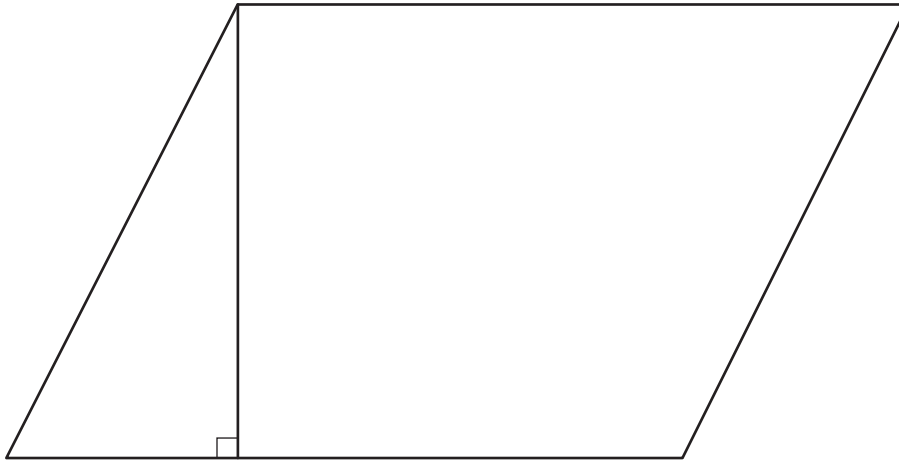


8. List the side lengths from shortest to longest.

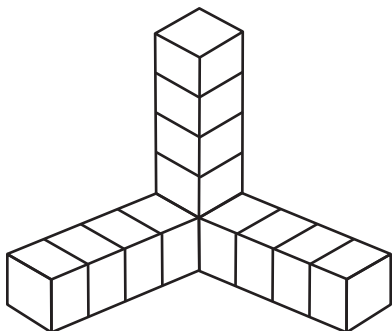


9. The area of a triangle is 27 square meters, and the height of the triangle is 9 meters. What is the base of the triangle in meters?

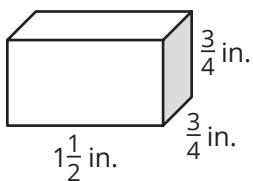
- 10.** Use a ruler to measure the dimensions of the given parallelogram to the nearest centimeter. What is the area of the parallelogram in square centimeters?



- 11.** 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?



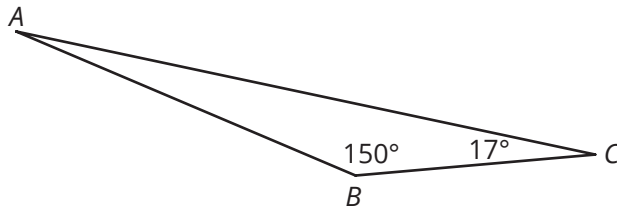
- 12.** Calculate the volume of the rectangular prism.



Part C: Griddable Response Questions

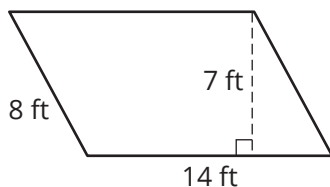
Record your answers and fill in the bubbles. Be sure to use the correct place value.

- 13.** In triangle ABC shown below, what is the measure of $\angle A$ in degrees?



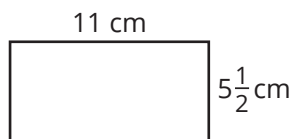
					.		
+	0	0	0	0		0	0
-	1	1	1	1		1	1
	2	2	2	2		2	2
	3	3	3	3		3	3
	4	4	4	4		4	4
	5	5	5	5		5	5
	6	6	6	6		6	6
	7	7	7	7		7	7
	8	8	8	8		8	8
	9	9	9	9		9	9

- 14.** Eileen paints a company's logo on the side of its truck. The logo is in the shape of a parallelogram with the dimensions shown. What is the area that Eileen paints in square feet?



					.		
+	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.** The rectangle shown represents the base of a rectangular prism.



The height of the prism is 6 centimeters. What is the volume of the prism in cubic centimeters?

					.		
⊕	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