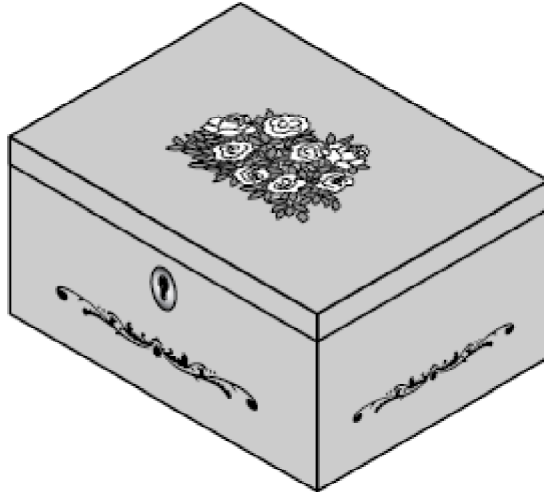


**Objective 4 Review 7.9 A,B,C**

**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

- \_\_\_\_\_ **1** A jewelry box is shown below. Use the ruler on the Mathematics Chart to measure the dimensions of the jewelry box in centimeters.



Which best represents the volume of the jewelry box?

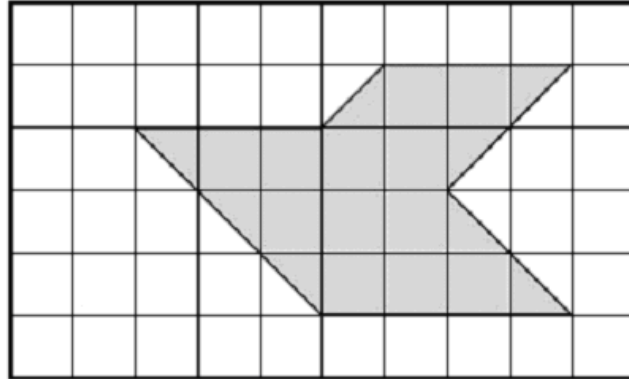
- |                             |                              |
|-----------------------------|------------------------------|
| <b>A.</b> 6 cm <sup>3</sup> | <b>C.</b> 14 cm <sup>3</sup> |
| <b>B.</b> 9 cm <sup>3</sup> | <b>D.</b> 24 cm <sup>3</sup> |
- \_\_\_\_\_ **2** Janeska ran in 3 races. The distances she ran in the races were 5 kilometers, 4.25 kilometers, and 5.5 kilometers. How many meters did Janeska run in the 3 races altogether?
- |                    |                    |
|--------------------|--------------------|
| <b>A.</b> 1,475 m  | <b>C.</b> 48,500 m |
| <b>B.</b> 14,750 m | <b>D.</b> 15,000 m |
- \_\_\_\_\_ **3** Ming has a plastic container that is shaped like a rectangular prism. The container has a length of 14 centimeters and a width of 6 centimeters. If the volume of the container is 840 cubic centimeters, what is its height?
- |                 |                  |
|-----------------|------------------|
| <b>A.</b> 10 cm | <b>C.</b> 14 cm  |
| <b>B.</b> 42 cm | <b>D.</b> 168 cm |

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

ID: A

- \_\_\_\_\_ **4** Bloom's Nursery designed a plan for Mrs. Hartrick's flower bed, as shown in the shaded part of the grid below.

Flower-Bed Plan



Each square on the grid represents 5 square feet. What will be the approximate area of the flower bed?

- A.** 100 ft<sup>2</sup>                                      **C.** 20 ft<sup>2</sup>  
**B.** 80 ft<sup>2</sup>                                      **D.** 16 ft<sup>2</sup>
- \_\_\_\_\_ **5** Kira drew a circle with a radius of 20 inches and another circle with a radius of 10 inches. What is the approximate difference between the areas of the 2 circles?
- A.** 300 in.<sup>2</sup>                                      **C.** 942 in.<sup>2</sup>  
**B.** 314 in.<sup>2</sup>                                      **D.** 1,256 in.<sup>2</sup>
- \_\_\_\_\_ **6** Marilou needs to cut a piece of glass for her table. The table is in the shape of a regular hexagon. The glass should measure  $1\frac{1}{2}$  feet on each side. What is the perimeter of the piece of glass?
- A.** 12 ft    **C.** 18 ft  
**B.** 9 ft    **D.** 7.5 ft

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

ID: A

7

Brenda wants to attach a string of beads along the circular bottom edge of the lamp shade shown below. The diameter of the bottom of the lamp shade is 16 centimeters.



About how many centimeters long should Brenda make the string of beads?

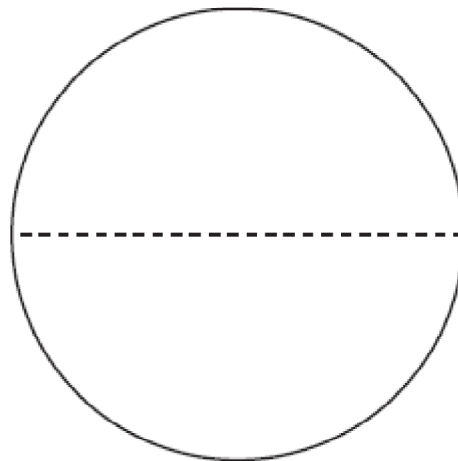
- A. 25 cm
- B. 50 cm

- C. 79 cm
- D. 201 cm

8

Jared designed buttons for his student-council campaign. The figure below shows the size of each campaign button. Use the ruler on the Mathematics Chart to measure the diameter of the button to the nearest quarter of an inch.

Jared's Campaign Button

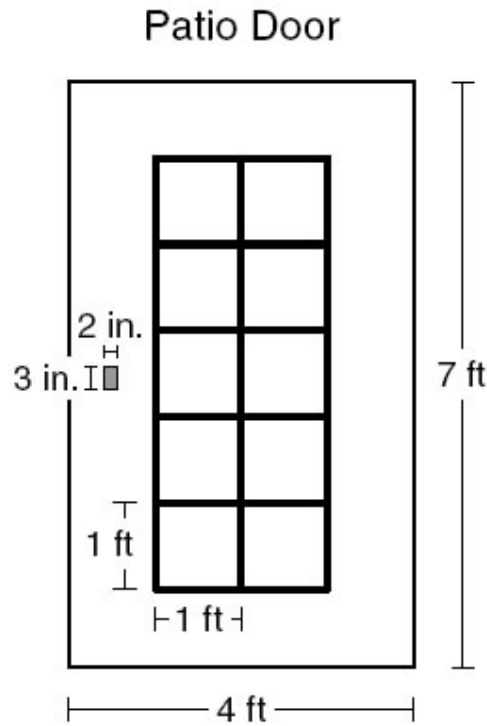


Which is closest to the circumference of the button that Jared designed?

- A. 15.7 in.
- B. 6.28 in.

- C. 7.8 in.
- D. 3.14 in.

- \_\_\_\_\_ **9** Mrs. Wagner painted the outside of the patio door to her house, as shown below. She did not paint the window or the door knob.

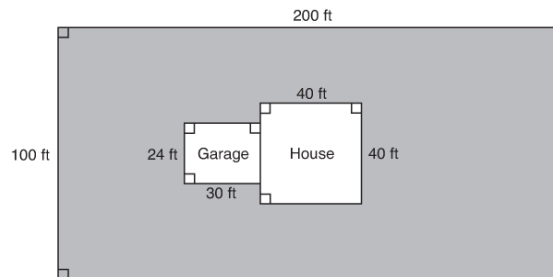


Which is closest to the painted area of the door in square feet?

- A.** 31 ft<sup>2</sup>                      **C.** 25 ft<sup>2</sup>  
**B.** 28 ft<sup>2</sup>                      **D.** 18 ft<sup>2</sup>

- \_\_\_\_\_ **10**

A pest-control company was hired to spray the lawn represented by the shaded region shown below.



What was the area in square feet that was sprayed?

- A.** 19,280 ft<sup>2</sup>                      **C.** 37,680 ft<sup>2</sup>  
**B.** 20,000 ft<sup>2</sup>                      **D.** 17,680 ft<sup>2</sup>

\_\_\_\_\_ **11**

Mr. Ellis was trying to find a tablecloth for his rectangular dining table. He knew the area and perimeter of the tabletop.

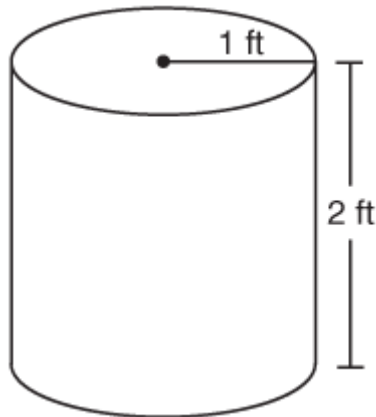
- Area = 36 square feet
- Perimeter = 26 feet

Which best represents the width and length of the tabletop?

- |  |   |
|--|---|
| <b>A.</b> Width = 2 ft<br>Length = 18 ft | <b>C.</b> Width = 6 ft<br>Length = 6 ft |
| <b>B.</b> Width = 3 ft<br>Length = 12 ft | <b>D.</b> Width = 4 ft<br>Length = 9 ft |

\_\_\_\_\_ **12**

For storage Mrs. Lin uses cylindrical containers like the one shown below.



If Mrs. Lin uses 2 of these containers, which is closest to the total volume of both containers?

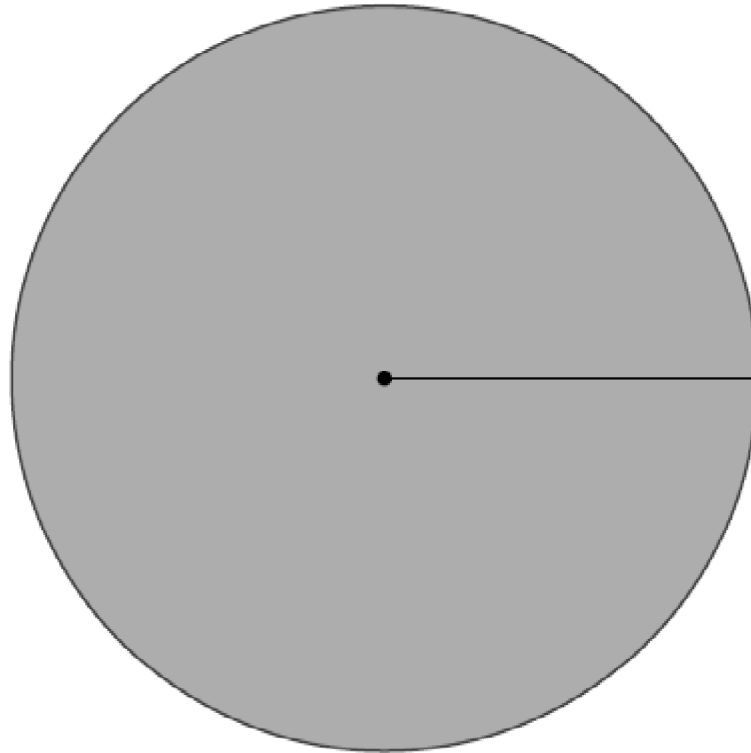
- |                         |                         |
|-------------------------|-------------------------|
| <b>A.</b> 13 cubic feet | <b>C.</b> 8 cubic feet  |
| <b>B.</b> 6 cubic feet  | <b>D.</b> 16 cubic feet |

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

ID: A

\_\_\_\_\_ **13** Yoko made a circular coaster in pottery class. Use the ruler on the Mathematics Chart to measure the radius of the coaster in centimeters.

Coaster



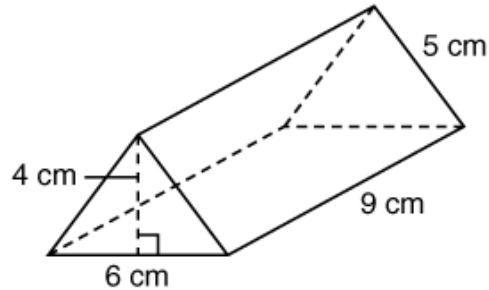
Which of the following is closest to the area of the top of the coaster?

- A.**  $64 \text{ cm}^2$
- B.**  $24 \text{ cm}^2$

- C.**  $46 \text{ cm}^2$
- D.**  $51 \text{ cm}^2$

\_\_\_\_\_ **14**

A company developed a box in the shape of a triangular prism, as shown below.



A formula for the volume of a triangular prism is  $V = Bh$ . Which expression can be used to find  $B$ , the area of the base of this prism in square centimeters?

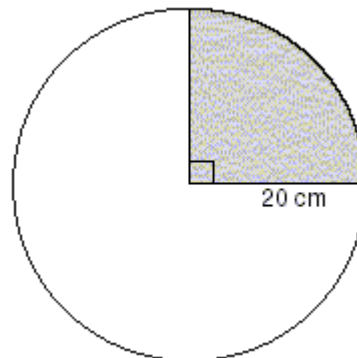
**A.**  $\frac{(6)(5)}{2}$

**C.**  $\frac{(6)(4)}{2}$

**B.**  $(6)(4)(9)$

**D.**  $(6)(5)(9)$

\_\_\_\_\_ **15** Margarita traces a circle with a radius of 20 centimeters like the one shown below. She will color in the shaded region.



What is the approximate area of the shaded region?

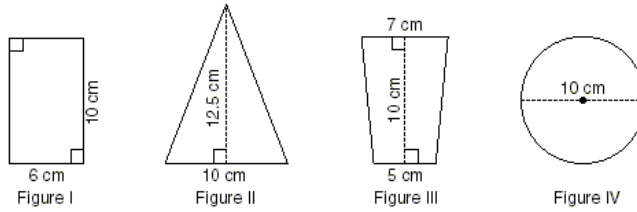
**A.**  $90 \text{ cm}^2$

**C.**  $314 \text{ cm}^2$

**B.**  $270 \text{ cm}^2$

**D.**  $1,256 \text{ cm}^2$

\_\_\_\_\_ **16** Cassie draws the following 4 figures.

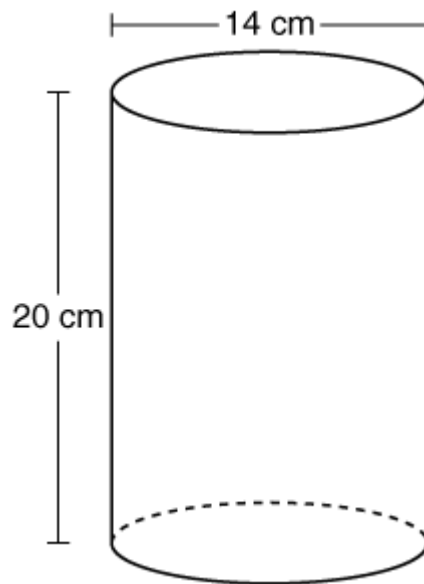


Which 2 figures have the same area?

- A. Figure I and Figure II
- B. Figure I and Figure III
- C. Figure II and Figure III
- D. Figure II and Figure IV

\_\_\_\_\_ **17**

Justin uses a container in the shape of a cylinder to store his markers. The diagram below shows the dimensions of the container.

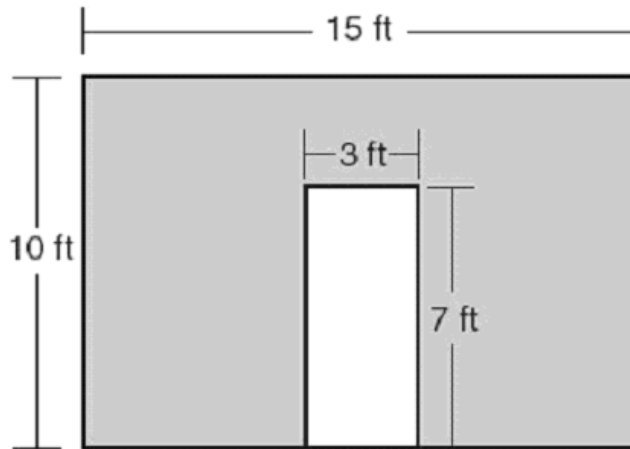


Which of the following is closest to the volume of the container?

- A.  $3,077 \text{ cm}^3$
- B.  $1,758 \text{ cm}^3$
- C.  $879 \text{ cm}^3$
- D.  $440 \text{ cm}^3$



\_\_\_\_\_ **18** Mrs. Jones wants to paint a wall, but not the door on the wall.

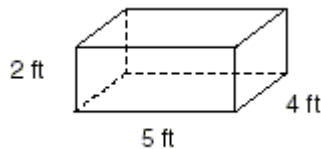


How many square feet of wall does Mrs. Jones need to paint?

- A.  $36 \text{ ft}^2$
- B.  $171 \text{ ft}^2$
- C.  $129 \text{ ft}^2$
- D.  $150 \text{ ft}^2$

**Numeric Response**

**19** Mr. McCrea is building a toy box like the one shown below.



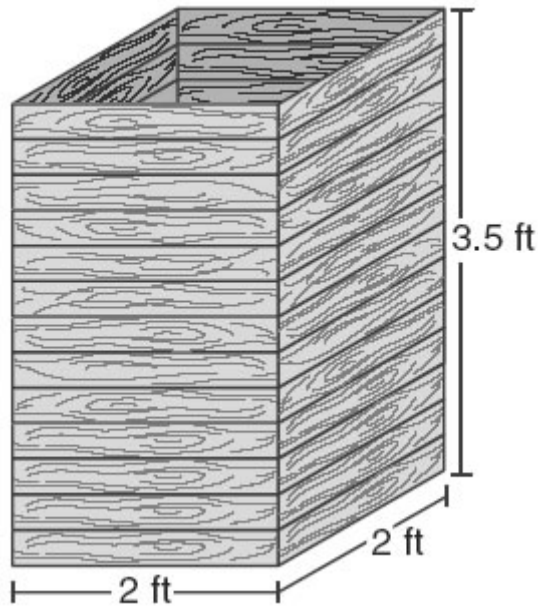
What is the volume of the toy box in cubic feet?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

				.		
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

20

Storage Box



				.		
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

The storage box was 3.5 feet high by 2 feet wide by 2 feet long. What is the volume of the storage box in cubic feet?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.