## CRCT GPS Practice Chapter 10

## LESSON 10-1

Identify the bases and faces of each figure. Then name the figure.
1.

2.

3.


## LESSON 10-2

Find how many cubes each prism holds. Then give the prism's volume.
4.

5.

6.

7. The back of a moving van is shaped like a rectangular prism. It is 24 ft long, 7 ft wide, and 8 ft high. Find the volume of the moving van.
8. A drum is shaped like a cylinder. It is 12.5 in . wide
 and 8 in . tall. Find its volume. Use 3.14 for $\pi$.

LESSON 10-3


Find the volume of each pyramid to the nearest tenth. Estimate to check whether the answer is reasonable.
9.

10.

11.


Find the volume of each cone to the nearest tenth. Use 3.14 for $\pi$. Estimate to check whether the answer is reasonable.
12.

13.

14.


LESSON 10-4
Find the surface area of the prism formed by each net to the nearest tenth.
15. 14 in .

16.

17.


Find the surface area of the cylinder formed by each net to the nearest tenth. Use 3.14 for $\pi$.
18.

19.

20.

21. An 8 in. tall candle is cylindrical and has a 3 in. wide ribbon around it. What percent of the total surface area of the candle is covered by the 3 in . wide ribbon? Use 3.14 for $\pi$. Round your answer to the nearest tenth.


## LESSON 10-5

22. The surface area of a cylinder is $49 \mathrm{~m}^{2}$. What is the surface area of a similar cylinder that is larger by a scale factor of 6 ?
23. The surface area of a garden is $36 \mathrm{ft}^{2}$. What is the surface area of a similar garden that is smaller by a scale factor of $\frac{1}{4}$ ?
24. The surface area of a hexagonal prism is $65 \mathrm{~cm}^{2}$. What is the surface area of a similar prism that is larger by a scale factor of 8 ?
25. The volume of a cube is $50 \mathrm{~cm}^{3}$. What is the volume of a similar cube that is larger by a scale factor of 7 ?
26. An oil drum has a volume of $513 \mathrm{~cm}^{3}$. What is the volume of a similar oil drum that is smaller by a scale factor of $\frac{1}{3}$ ?
