## Lesson 3 Assignment Surface Area

## Multiple Choice

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

1. What is the surface area of a cube that measures $16^{\prime \prime}$ on each side?
a. $2048 \mathrm{in}^{2}$
b. 1536 in $^{2}$
c. $1024 \mathrm{in}^{2}$
d. $256 \mathrm{in}^{2}$
$\qquad$ 2. An aluminum pop can measures 11 cm high and has a radius of 3 cm . What is the surface area of the exposed can, to 2 decimal places?
a. $\quad 28.27 \mathrm{~cm}$
b. $\quad 367.57 \mathrm{~cm}$
c. 263.89 cm
d. 226.19 cm
$\qquad$ 3. Find the surface area of this cone. Include the surface area of the base of the cone. Round to 1 decimal place.

a. $\quad 21519.9 \mathrm{~cm}^{2}$
b. $879.6 \mathrm{~cm}^{2}$
c. $\quad 1162.4 \mathrm{~cm}^{2}$
d. $\quad 1099.6 \mathrm{~cm}^{2}$
2. What is the surface area of a box with no lid that is 75 cm long, 0.4 m wide, and 200 mm high?
a. $\quad 7600 \mathrm{~cm}^{2}$
b. $\quad 10600 \mathrm{~cm}^{2}$
c. $30220 \mathrm{~cm}^{2}$
d. $5700 \mathrm{~cm}^{2}$
3. Two cylinders of radius 7 cm are placed together end to end. If the first cylinder was 13 cm long and the second was 8 cm long, what is the surface area of this new cylinder?
a. $\quad 1477.8 \mathrm{~cm}^{2}$
b. $\quad 1539.4 \mathrm{~cm}^{2}$
c. $\quad 1231.5 \mathrm{~cm}^{2}$
d. $\quad 985.2 \mathrm{~cm}^{2}$

## Short Answer

6. Determine the surface area of this regular tetrahedron to the nearest square centimetre.

7. Determine the surface area of this right cone to the nearest square metre.

8. A right cone has a height of 15 in . and a base diameter of 8 in . Determine the lateral area of the cone to the nearest square inch.
9. The radius of a volleyball is approximately 11 cm . Determine the surface area of a volleyball to the nearest square centimetre.
10. A right cone has a slant height of 14 in . and a base diameter of 10 in . Determine the surface area of the cone to the nearest square inch.
11. Sandy is painting the living room in her house. The room measures 18 feet long by 11 feet wide by 8 feet high. She will only paint the walls and not the floor or ceiling. What is the total area Sandy will paint?
12. A hemisphere has radius 7 ft . Determine the surface area of the hemisphere to the nearest square foot.
