12-2 Skills Practice
Surface Areas of Prisms

Find the lateral area of each prism.

1. \(768\)
2. \(432\)
3. \(168\)
4. \(394.15\)

Find the surface area of each prism. Round to the nearest tenth if necessary.

5. \(600\)
6. \(782\)
7. \(312.17\)
8. \(109.37\)
Skills Practice

Surface Areas of Cylinders

Find the surface area of a cylinder with the given dimensions. Round to the nearest tenth.

1. \( r = 10 \text{ in.}, h = 12 \text{ in.} \)
   \[
   440\pi \text{ in.}^2
   \]

3. \( r = 5 \text{ ft.}, h = 20 \text{ ft} \)
   \[
   250\pi \text{ ft}^2
   \]

5. \( d = 8 \text{ m}, h = 7 \text{ m} \)
   \[
   88\pi \text{ m}^2
   \]

2. \( r = 8 \text{ cm}, h = 15 \text{ cm} \)
   \[
   368\pi \text{ cm}^2
   \]

4. \( d = 20 \text{ yd}, h = 5 \text{ yd} \)
   \[
   300\pi \text{ yd}^2
   \]

6. \( d = 24 \text{ mm}, h = 20 \text{ mm} \)
   \[
   1248\pi \text{ mm}^2
   \]

Find the surface area of each cylinder. Round to the nearest tenth.

7. \[
\text{Cylinder with radius 5 ft and height 7 ft.}
\]
   \[
   120\pi \text{ ft}^2
   \]

8. \[
\text{Cylinder with radius 4 m and height 8.5 m.}
\]
   \[
   42\pi \text{ m}^2
   \]

Find the radius of the base of each cylinder.

9. The surface area is 603.2 square meters, and the height is 10 meters.

10. The surface area is 100.5 square inches, and the height is 6 inches.

11. The surface area is 226.2 square centimeters, and the height is 5 centimeters.

12. The surface area is 1520.5 square yards, and the height is 14.2 yards.