NAME _____ DATE _____ PERIOD ____

12-4 Practice

Surface Areas of Cylinders

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

1. $r = 8$ cm, $h = 9$ cm

894.5 cm^2

2. $r = 12$ in., $h = 14$ in.

1960.4 in^2

3. $d = 14$ mm, $h = 32$ mm

1715.3 mm^2

4. $d = 6$ yd, $h = 12$ yd

282.7 yd^2

5. $r = 2.5$ ft, $h = 7$ ft

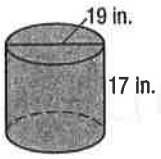
149.2 ft^2

6. $d = 13$ m, $h = 20$ m

1082.3 m^2

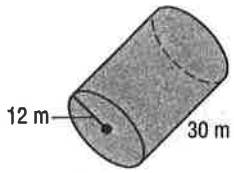
Find the surface area of each cylinder. Round to the nearest tenth.

7.



1581.8 in^2

8.



3166.7 m^2

Find the radius of the base of each right cylinder.

9. The surface area is 628.3 square millimeters, and the height is 15 millimeters.

5 mm

10. The surface area is 892.2 square feet, and the height is 4.2 feet.

10 ft

11. The surface area is 158.3 square inches, and the height is 5.4 inches.

3in

12. KALEIDOSCOPES Nathan built a kaleidoscope with a 20-centimeter barrel and a 5-centimeter diameter. He plans to cover the barrel with embossed paper of his own design. How many square centimeters of paper will it take to cover the barrel of the kaleidoscope?

$\approx$ 314.2 cm^2

NAME _____ DATE _____ PERIOD ____

12-4 Skills Practice

Surface Areas of Cylinders

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

1. $r = 10$ in., $h = 12$ in.

1382.3 in^2

2. $r = 8$ cm, $h = 15$ cm

1156.1 cm^2

3. $r = 5$ ft, $h = 20$ ft

785.4 ft^2

4. $d = 20$ yd, $h = 5$ yd

942.5 yd^2

5. $d = 8$ m, $h = 7$ m

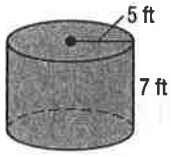
276.5 m^2

6. $d = 24$ mm, $h = 20$ mm

2412.7 mm^2

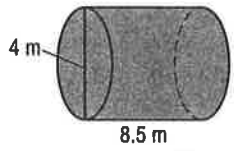
Find the surface area of each cylinder. Round to the nearest tenth.

7.



377.0 ft^2

8.



131.9 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.

6 m

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

2 in

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

4 cm

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

10 yd.

Lesson 12-4