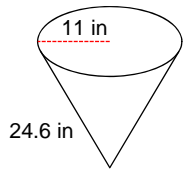


Assignment

Date _____ Period _____

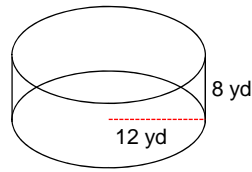
Find the lateral area and surface area of each right circular cylinder and cone. Round your answers to the nearest tenth, if necessary. Leave your answers in terms of π for answers that contain π .

1)



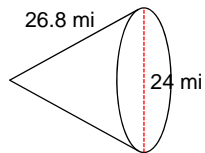
$$270.6\pi \text{ in}^2; 391.6\pi \text{ in}^2$$

2)



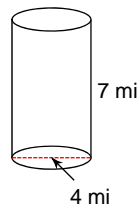
$$192\pi \text{ yd}^2; 480\pi \text{ yd}^2$$

3)



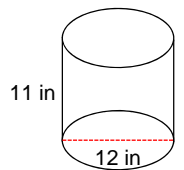
$$321.6\pi \text{ mi}^2; 465.6\pi \text{ mi}^2$$

4)



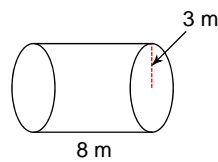
$$28\pi \text{ mi}^2; 36\pi \text{ mi}^2$$

5)



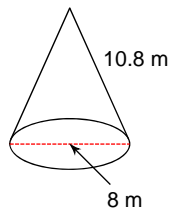
$$132\pi \text{ in}^2; 204\pi \text{ in}^2$$

6)



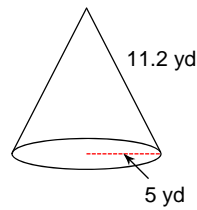
$$48\pi \text{ m}^2; 66\pi \text{ m}^2$$

7)



$$43.2\pi \text{ m}^2; 59.2\pi \text{ m}^2$$

8)



$$56\pi \text{ yd}^2; 81\pi \text{ yd}^2$$

Find the surface area of each right circular cylinder and cone. Round your answers to the nearest tenth, if necessary. Leave your answers in terms of π for answers that contain π .

9) A cylinder with a radius of 3 in and a height of 2 in.

$$30\pi \text{ in}^2$$

10) A cone with diameter 16 cm and a slant height of 17.9 cm.

$$207.2\pi \text{ cm}^2$$

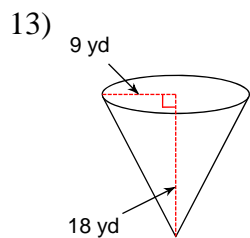
11) A cylinder with a diameter of 6 in and a height of 8 in.

$$66\pi \text{ in}^2$$

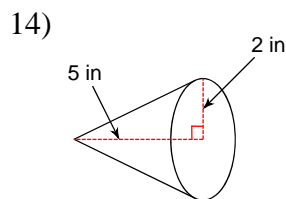
12) A cone with radius 2 mi and a slant height of 11.2 mi.

$$26.4\pi \text{ mi}^2$$

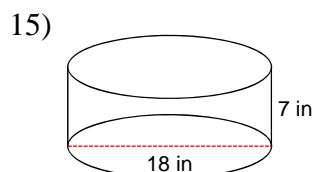
Find the volume of each right circular cylinder and cone. Round your answers to the nearest tenth, if necessary. Leave your answers in terms of π for answers that contain π .



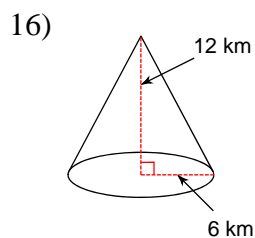
$$486\pi \text{ yd}^3$$



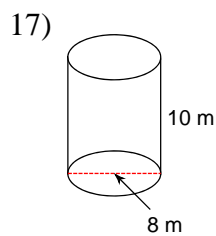
$$6.7\pi \text{ in}^3$$



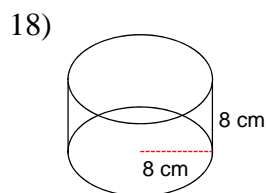
$$567\pi \text{ in}^3$$



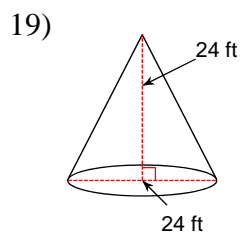
$$144\pi \text{ km}^3$$



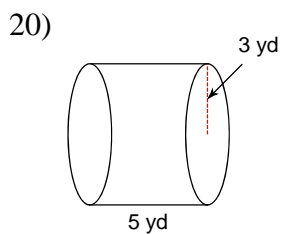
$$160\pi \text{ m}^3$$



$$512\pi \text{ cm}^3$$



$$1152\pi \text{ ft}^3$$



$$45\pi \text{ yd}^3$$

21) A cone with diameter 18 yd and a height of 18 yd.

$$486\pi \text{ yd}^3$$

22) A cylinder with a radius of 5 yd and a height of 5 yd.

$$125\pi \text{ yd}^3$$

23) A cone with radius 11 km and a height of 22 km.

$$887.3\pi \text{ km}^3$$

24) A cylinder with a diameter of 4 km and a height of 4 km.

$$16\pi \text{ km}^3$$