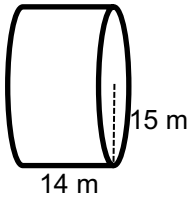
15.3 Surface area of Rectangular Prisms and Cylinders

15.3 Solutions

Instructions: Find the area of each figure. Round to the nearest hundredth, if necessary.

1.



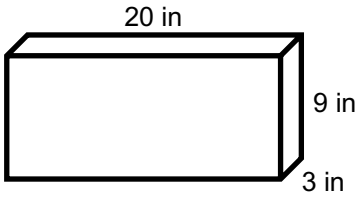
SA = 2(AREA CIRCLES) + AREA RECTANGLE

$SA = 2(\pi r^2) + \pi D(h)$

$SA = 2(3.14 \times 15^2) + (3.14)30(14)$

Surface Area: $SA = 2731.8\ m^2$

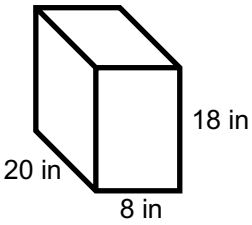
2.



$SA = 2(20 \times 3) + 2(20 \times 9) + 2(3 \times 9)$

Surface Area: $SA = 102\ in^2$

3.



$SA = 2(20 \times 8) + 2(20 \times 18) + 2(8 \times 18)$

Surface Area: $SA = 1328\ in^2$

4.

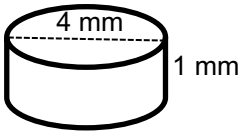
SA = 2(AREA CIRCLES) + AREA RECTANGLE

$SA = 2(\pi r^2) + \pi D(h)$

$SA = 2(3.14 \times 3^2) + (3.14)6(11)$

Surface Area: $SA = 263.76\ ft^2$

5.



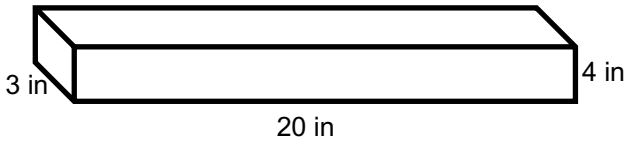
SA = 2(AREA CIRCLES) + AREA RECTANGLE

$SA = 2(\pi r^2) + \pi D(h)$

$SA = 2(3.14 \times 2^2) + (3.14)4(1)$

Surface Area: $SA = 37.68\ mm^2$

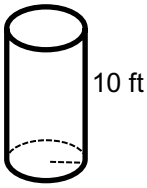
6.



$SA = 2(20 \times 3) + 2(20 \times 4) + 2(3 \times 4)$

Surface Area: $SA = 304\ in^2$

7.



Radius = 6 ft

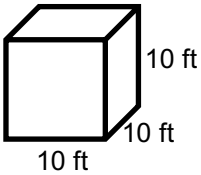
SA = 2(AREA CIRCLES) + AREA RECTANGLE

$SA = 2(\pi r^2) + \pi D(h)$

$SA = 2(3.14 \times 6^2) + (3.14)12(10)$

Surface Area: $SA = 602.88\ ft^2$

8.



$SA = 2(10 \times 10) + 2(10 \times 10) + 2(10 \times 10)$

Surface Area: $SA = 600\ ft^2$