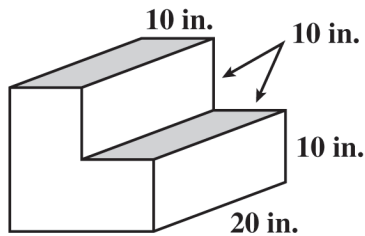


Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and volume is multiplied by the cube of the scale factor. 7MG2.3

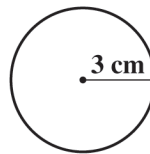
115. The short stairway shown below is made of solid concrete. The height and width of each step is 10 inches (in.). The length is 20 inches.



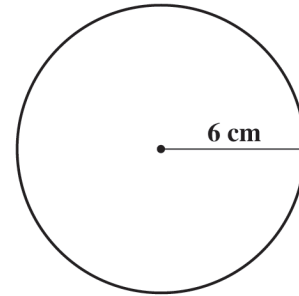
What is the volume, in cubic inches, of the concrete used to create this stairway?

- A 3000
- B 4000
- C 6000
- D 8000

Circle x



Circle y

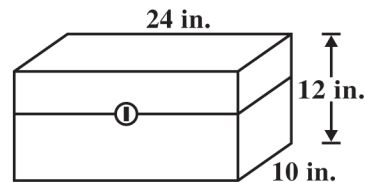


116. The two circles shown above have radii of 3 cm and 6 cm.

What is $\frac{\text{Circumference of Circle } x}{\text{Circumference of Circle } y}$?

- A $\frac{1}{4}$
- B $\frac{1}{2}$
- C $\frac{\pi}{4}$
- D $\frac{\pi}{2}$

118. Gina is painting the rectangular tool chest shown in the diagram below.



117. Bonni has two similar rectangular boxes. The dimensions of box 1 are twice those of box 2. How many times greater is the volume of box 1 than the volume of box 2?

- A 3
- B 6
- C 8
- D 9

If Gina paints only the outside of the tool chest, what is the total surface area, in square inches (in.^2), she will paint?

- A 368
- B 648
- C 1296
- D 2880