

# Worksheet

12/06/2020

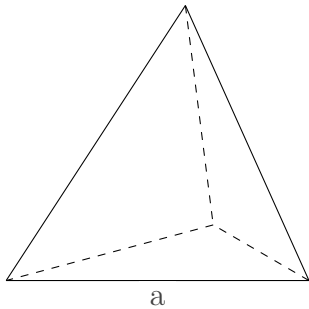
Free on dw-math.com

Problem quickname: 2200

1)

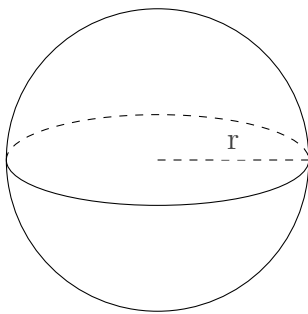
State the formulas for the required metrics of the given shape.

a)



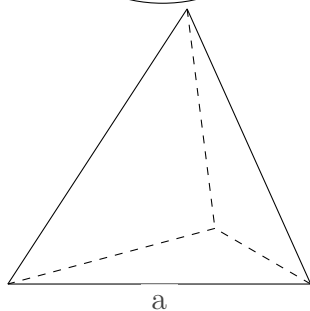
This is a regular tetrahedron. All edges are of the same length with  $a=14$  cm. What is the volume of this shape?

b)



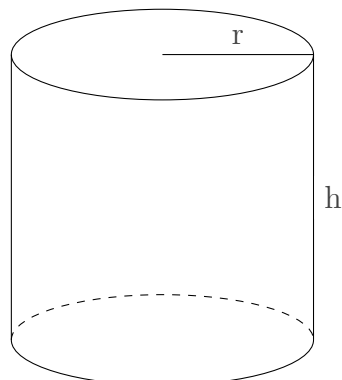
This is a sphere. We have  $r=4$  cm. What is the volume of this shape?

c)



This is a regular tetrahedron. All edges are of the same length with  $a=15$  mm. What is the surface area of this shape?

d)

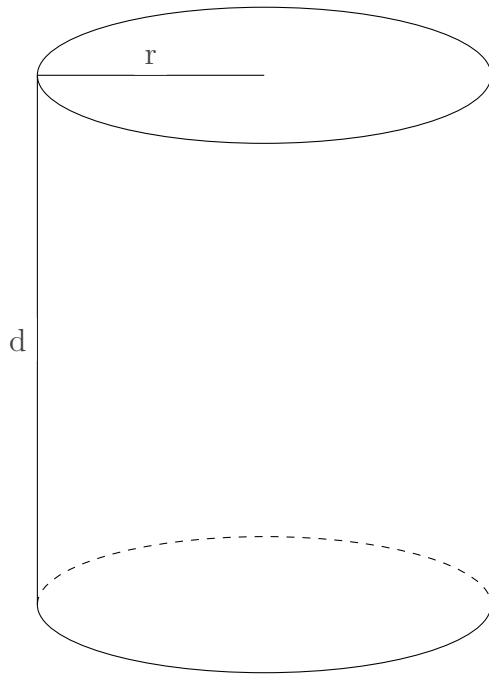


This is a cylinder. The base of this shape is formed by a circle. We have  $r=9$  cm,  $h=17$  cm. What is the volume of this shape?

2)

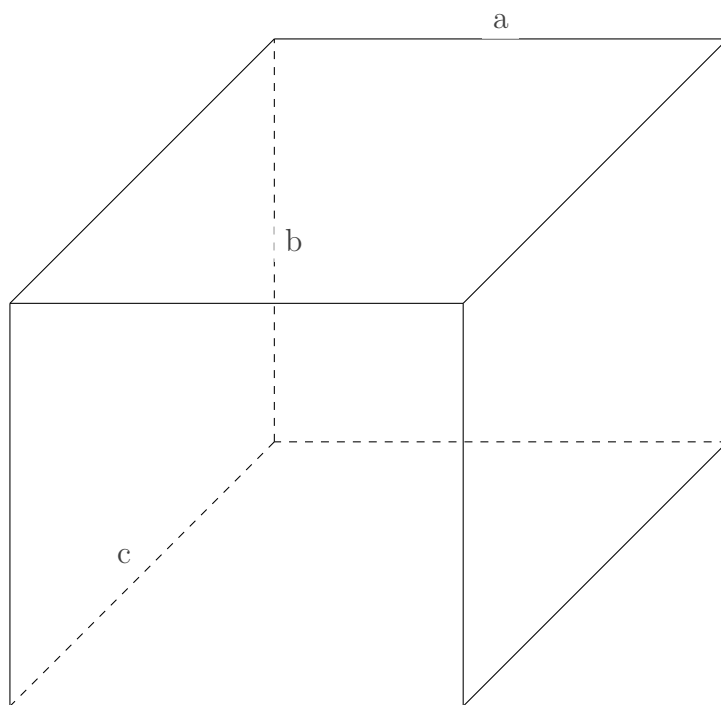
Calculate the approximate values of the shapes metrics as requested.

a)



The base of this shape is formed by a circle. We have  $r = 6$ ,  $d = 14$ . What is the surface area of this shape? Round to the nearest whole number. Assume the value of 3.14 for pi.

b)

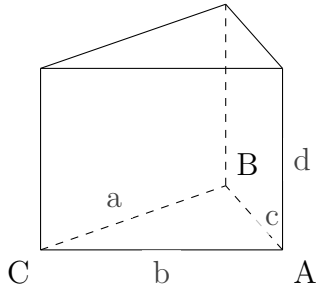


We have  $a = 18$ ,  $b = 16$ ,  $c = 21$ . What is the volume of this shape?

3)

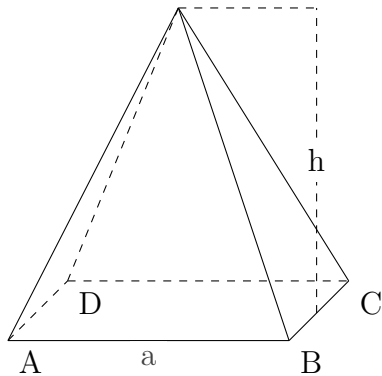
State the formulas for the required metrics of the given shape.

a)



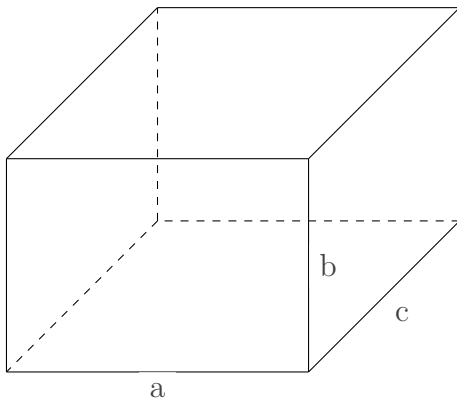
This is a prism. The base of this shape is formed by a triangle ABC which has an area of  $A(\text{triangle})=24 \text{ mm}^2$ . We have  $a=6 \text{ mm}$ ,  $b=8 \text{ mm}$ ,  $c=10 \text{ mm}$ ,  $d=6 \text{ mm}$ . What is the volume of this shape?

b)



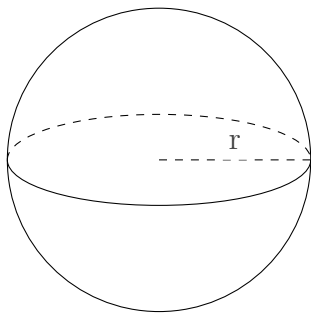
This is a square pyramid. The base of this shape is formed by a square. We have  $a=13 \text{ mm}$ ,  $h=14 \text{ mm}$ . What is the volume of this shape?

c)



This is a cuboid. We have  $a=17 \text{ m}$ ,  $b=12 \text{ m}$ ,  $c=17 \text{ m}$ . What is the volume of this shape?

d)

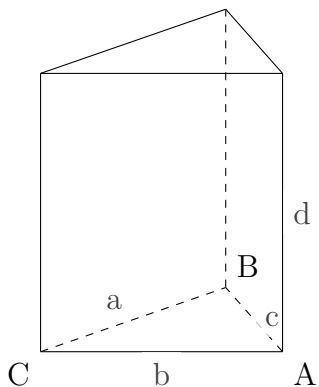


This is a sphere. We have  $r=17 \text{ mm}$ . What is the volume of this shape?

4)

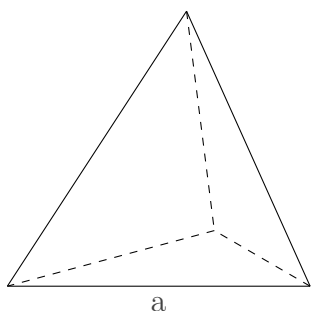
Calculate the approximate values of the shapes metrics as requested.

a)



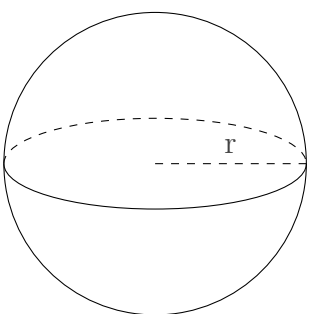
This is a prism. The base of this shape is formed by a triangle ABC which has an area of  $A(\text{triangle})=6 \text{ cm}^2$ . We have  $a=3 \text{ cm}$ ,  $b=4 \text{ cm}$ ,  $c=5 \text{ cm}$ ,  $d=4 \text{ cm}$ . What is the surface area of this shape?

b)



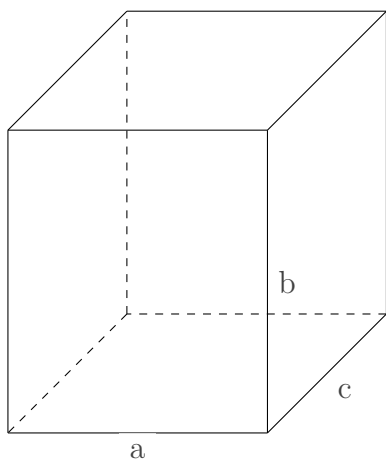
This is a regular tetrahedron. All edges are of the same length with  $a=1 \text{ cm}$ . What is the volume of this shape? Round to the nearest whole number.

c)



This is a sphere. We have  $r=2 \text{ mm}$ . What is the volume of this shape? Round to the nearest whole number. Assume the value of 3.14 for pi.

d)



This is a cuboid. We have  $a=1 \text{ cm}$ ,  $b=2 \text{ mm}$ ,  $c=1 \text{ cm}$ . What is the volume of this shape?

Good Luck!