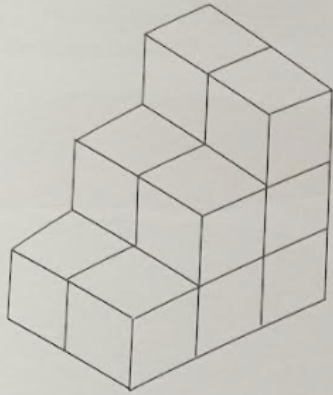


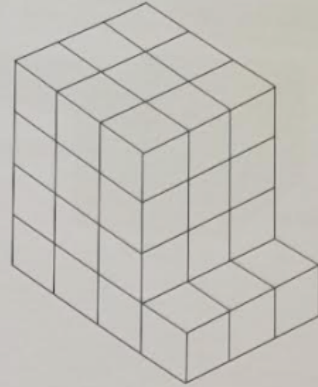


Achievement – Find the volume of the following by counting cubes. Each cube measures  $1\text{ cm}^3$ .

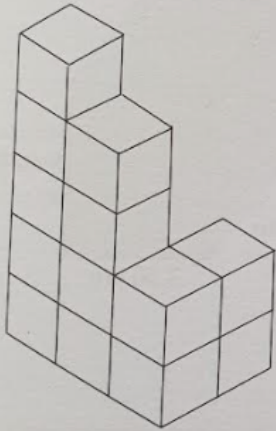
220.



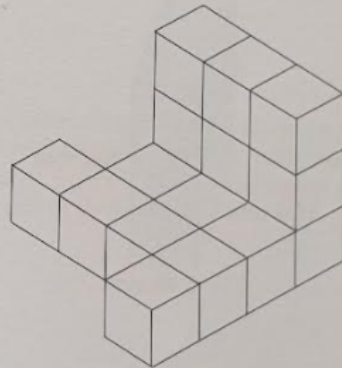
221.



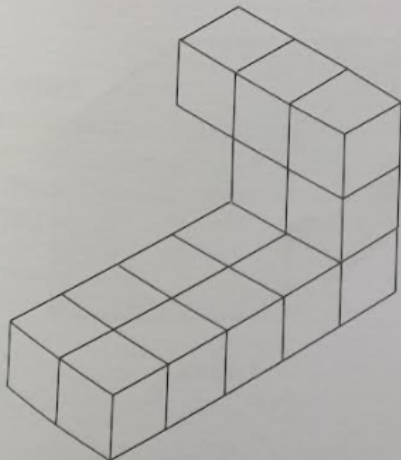
222.



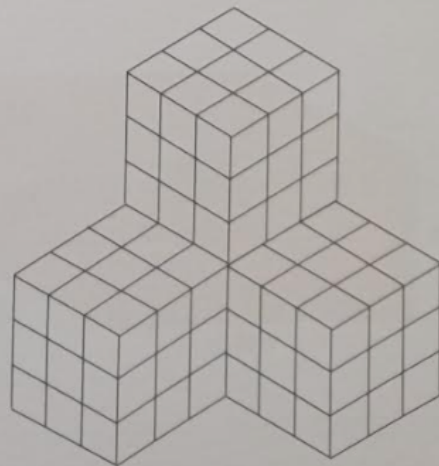
223.



224.



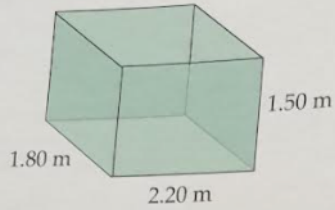
225.



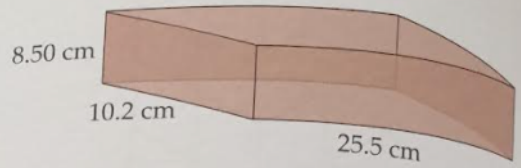


Achievement – Answer the following volume questions. Round your answers to 3 sf.

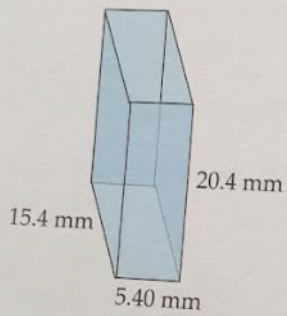
226. Find the volume of



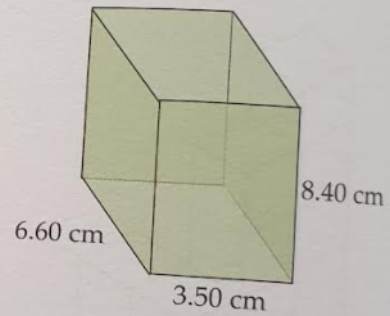
227. Find the volume of



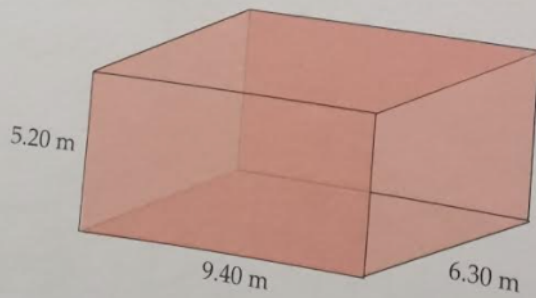
228. Find the volume of



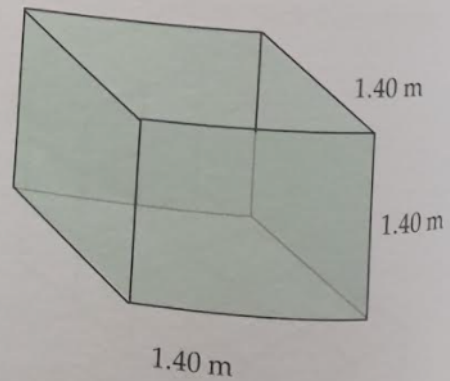
229. Find the volume of



230. Find the volume of



231. Find the volume of



Answers

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220. Vol. =  $12 \text{ cm}^3$

221. Vol. =  $39 \text{ cm}^3$

222. Vol. =  $13 \text{ cm}^3$

223. Vol. =  $17 \text{ cm}^3$

224. Vol. =  $15 \text{ cm}^3$

225. Vol. =  $108 \text{ cm}^3$

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226. Vol. =  $5.94 \text{ m}^3$

227. Vol. =  $2210 \text{ cm}^3$

228. Vol. =  $1700 \text{ mm}^3$

229. Vol. =  $194 \text{ cm}^3$

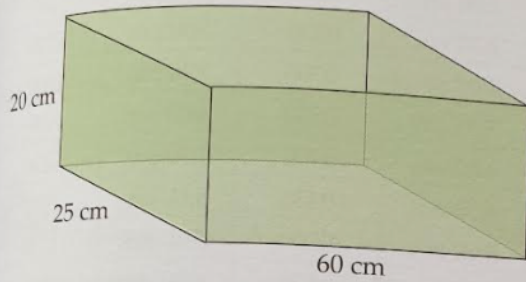
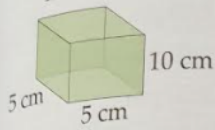
230. Vol. =  $308 \text{ m}^3$

231. Vol. =  $2.74 \text{ m}^3$

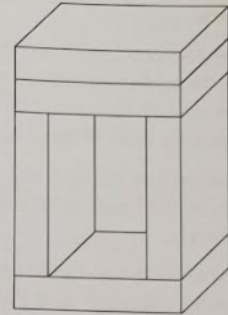
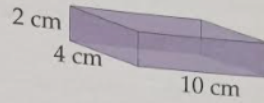


Merit – Answer the following questions.

232. The diagram below shows a small and a large cuboid. How many of the small cuboids will fit in the large cuboid?



233. A structure is made out of the building block below. Calculate the volume of the structure?



234. One hundred sugar cubes each measuring 2 cm by 2 cm by 2 cm are packed in a box. What is the volume of the box?

235. A box measuring 60 cm by 40 cm by 30 cm is to be packed with chocolate bars measuring 10 cm by 3 cm by 2 cm. How many chocolate bars will fit in the box?

236. A cuboid container measuring 30 cm by 20 cm by 10 cm is filled with water. How many litres of water will it hold?

237. What is the capacity in litres of a cuboid shaped water tank measuring 2.1 m by 1.5 m by 0.8 m.

238. Investigate what happens to the volume of a cube if its length, width and height are doubled. Draw an appropriate conclusion.

239. Investigate what happens to the volume of a cube if its length, width and height are halved. Draw an appropriate conclusion.

Answers



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232. Vol. large =  $30\,000\text{ cm}^3$

Vol. small =  $250\text{ cm}^3$

120 small cubes will fit in the large cube.

233. Vol. block =  $80\text{ cm}^3$

Vol. structure =  $5 \times 80\text{ cm}^3$   
=  $400\text{ cm}^3$

234. Vol. =  $800\text{ cm}^3$

235. 1200 chocolate bars

236. Vol. =  $6000\text{ cm}^3$

) water = 6 litres

237. Capacity = 2520 litres

0 238. Cube with sides 2 cm has  
0) volume =  $8\text{ cm}^3$ . Cube with  
sides 4 cm has volume  $64\text{ cm}^3$ .  
Volume has increased by a  
factor of 8.