

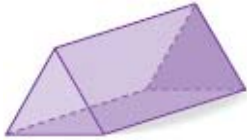
Area and Volume

Volume and Surface Area

10.2.1 Three-Dimensional Figures

Identify the number of faces, edges, and vertices on each three-dimensional figure.

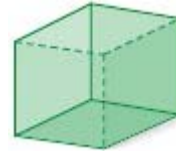
1.



2.



3.



Name each three-dimensional figure represented by each object.

4.



5.

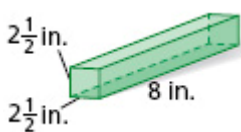


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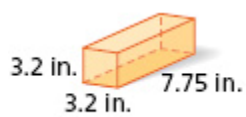
10.2.2 Volume of Prisms

Find the volume of each rectangular prism.

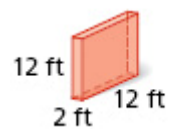
7.



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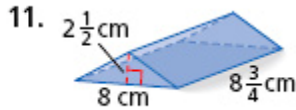
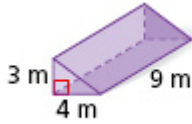


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Find the volume of each triangular prism.

10.



12.

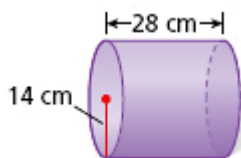


13. A printing company packs 18 cubic boxes of business cards in a larger shipping box. What are the possible dimensions for the shipping box?

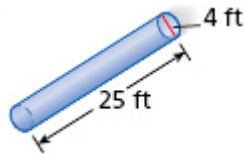
10.2.3 Volume of Cylinders

Find the volume V of each cylinder to the nearest cubic unit.

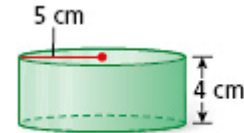
14.



15.



16.

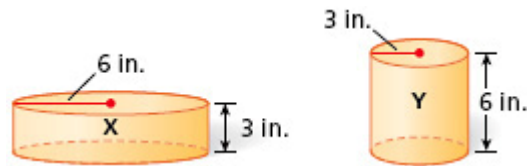


17. Wooden dowels are solid cylinders of wood. One dowel has a radius of 1 cm, and another dowel has a radius of 3 cm. Both dowels have a height of 10 cm. Estimate the volume of each dowel to the nearest cubic cm.

Area and Volume

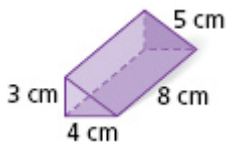
Volume and Surface Area

18. Find which cylinder, X or Y, has the greater volume.

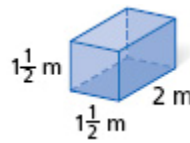
10.2.4 Surface Area

Find the surface area S of each prism.

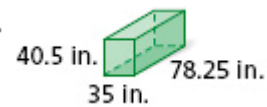
19.



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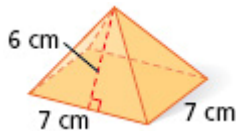


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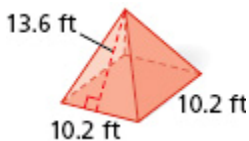


Find the surface area S of each pyramid.

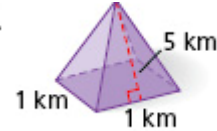
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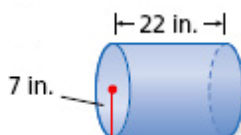


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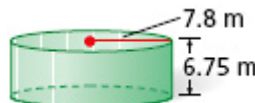


Find the surface area S of each cylinder. Use 3.14 for π , and round to the nearest hundredth.

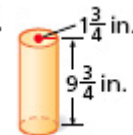
25.



26.



27.



Area and Volume

Volume and Surface Area

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