Notes 15.1

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Example

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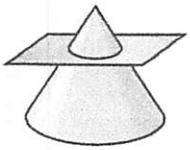
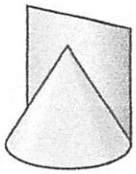
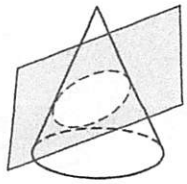
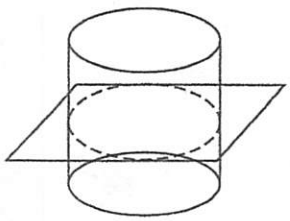
a. 

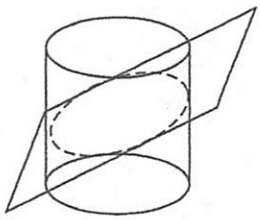
b. 

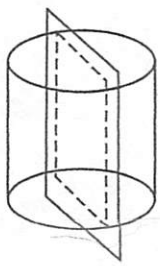
c. 

Exercises

Describe each cross section.

1. 

2. 

3. 

REVOLING 2-D SHAPES TO GET VOLUME

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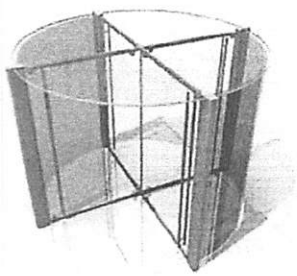
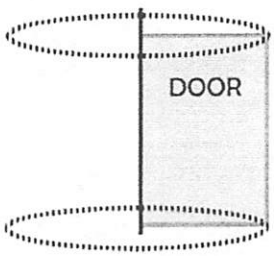
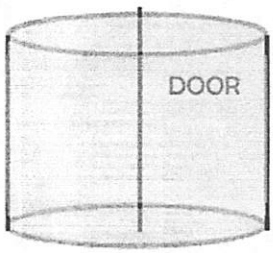
Revolving Door



Cross Section of Door



Imagine as the door revolves it filling the entire space of the cylinder



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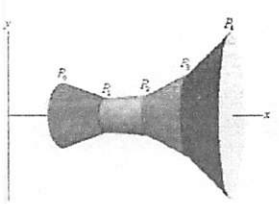
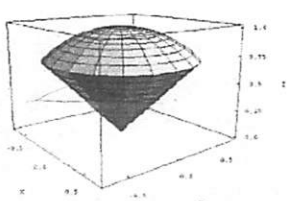
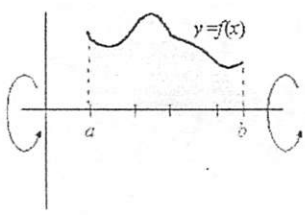
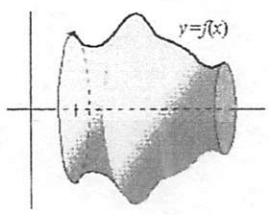




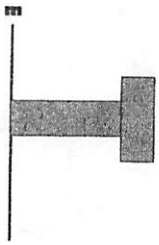




Determine the 3-D solid that would be formed by rotating the cross section about line m.

1.

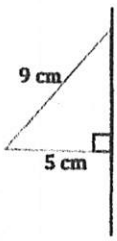
2.



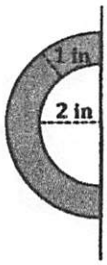
3.

Identify the solid created when the following shape is rotated around the line.

4.



5.



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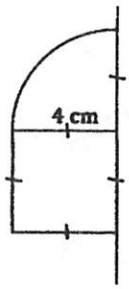
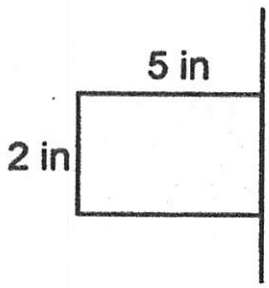
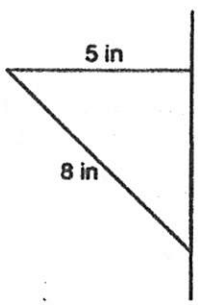


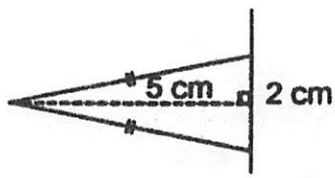
7.



8.



9.



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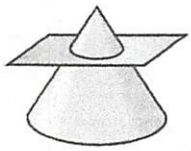
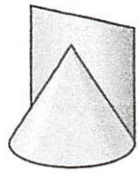


Circle

Horizontal

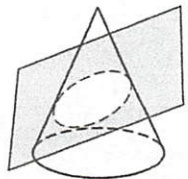
b.



triangle

Vertical

c.



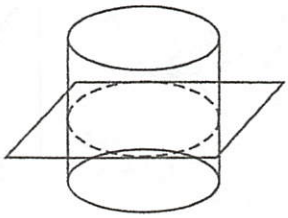
ellipse

diagonal

Exercises

Describe each cross section.

1.



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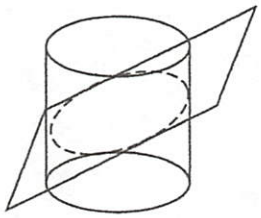
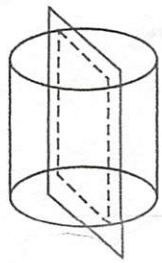


3.



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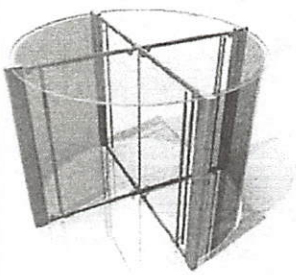

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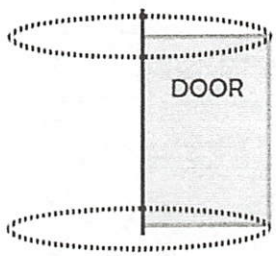

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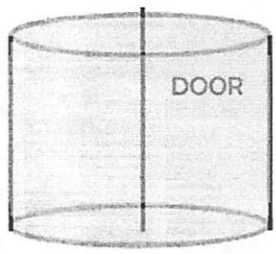

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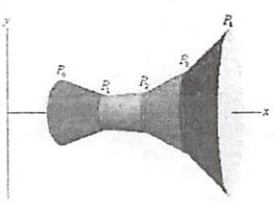

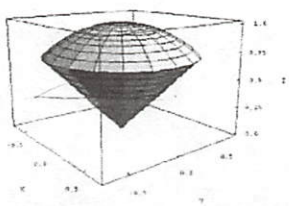

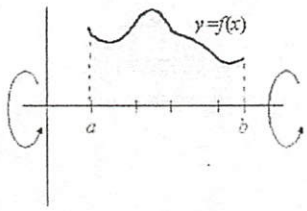

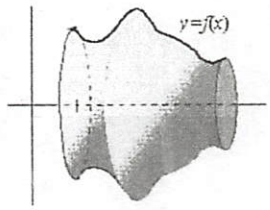

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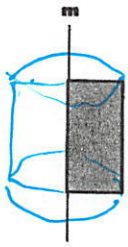
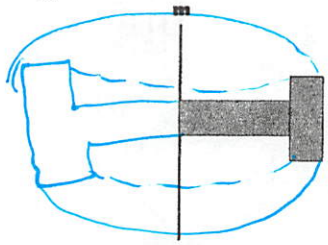


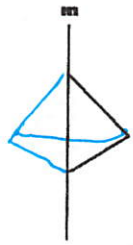
Cylinder

2.



Cylinder with hole in bottom top

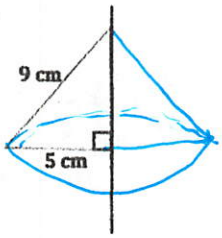
3.



Two cones with bases together

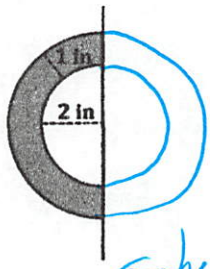
Identify the solid created when the following shape is rotated around the line.

4.



Cone with radius: 5cm

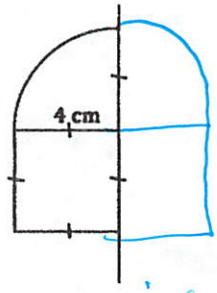
5.



radius = 3 in

Sphere w/ empty center

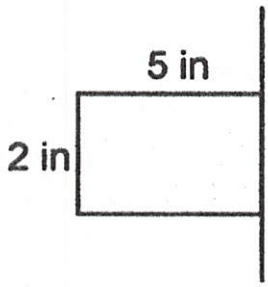
6.



Both radius = 4 cm

Cylinder with half-sphere

7.



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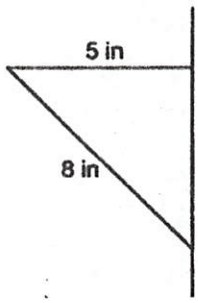

9.