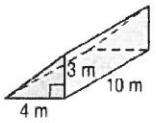
Name: _____ Solids Review

Find the surface area and volume of each solid below.

Prisms

1.



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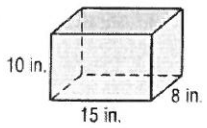

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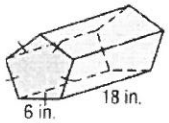

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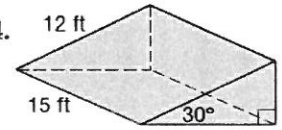

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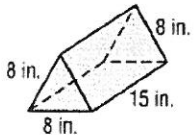
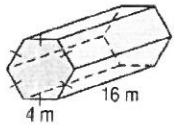
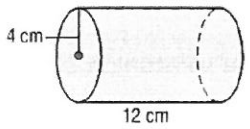


6.



Cylinders

1.



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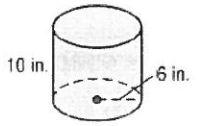

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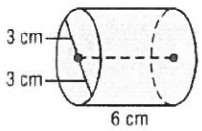

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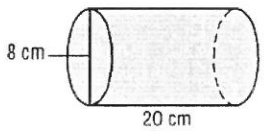

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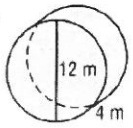

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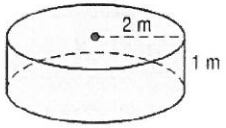
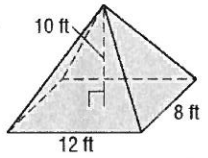


Pyramids

1.



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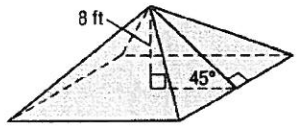

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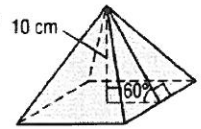

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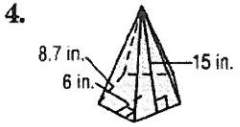

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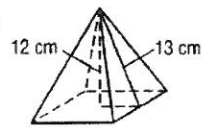

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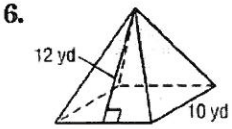
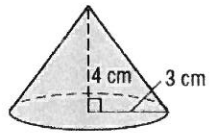


Cones

1.



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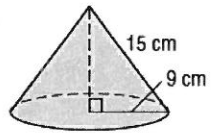

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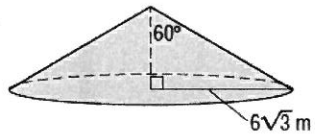

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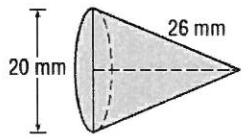

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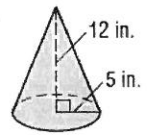

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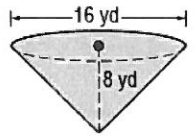
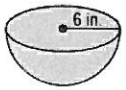
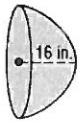
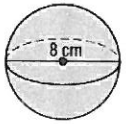


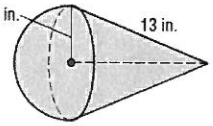
Spheres

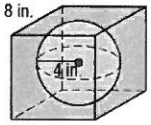
1. 

2. 

3. 

4. 

5. 

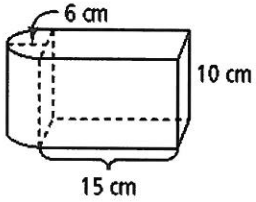
6. 

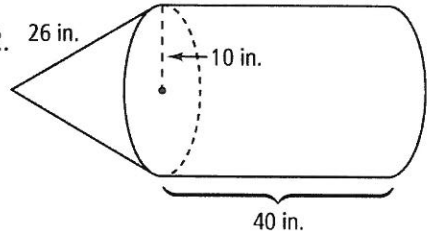
difference between volume of cube and volume of sphere

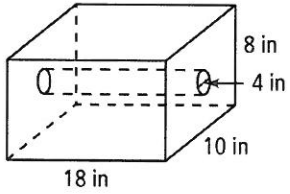
7. The total surface area of a sphere is 676π. Find the volume of the sphere

8. The volume of a sphere is 4500π. Find the surface area of the sphere

Composite Solids – Find the volume of the solids.

1. 

2. 

3. 

ANSWER KEY

Prisms:
1) SA = 132; V = 60 2) SA = 700; V = 1200 3) SA = 663.87; V = 1114.874) SA = 488.24; V = 467.65 5) SA = 415.42; V = 415.69
6) SA = 467.14; V = 665.12

Cylinders:
1) SA = 402.12; V = 603.18 2) SA = 603.18; V = 1130.97
3) SA = 169.65; V = 169.65 4) SA = 603.18; V = 1005.3
5) SA = 376.99; V = 452.38 6) SA = 37.69; V = 12.56

Pyramids:
1) SA = 318.5; V = 320 2) SA = 618.6; V = 682.7
3) SA = 399.9; V = 444.4 4) SA = 456.75 5) SA = 360; V = 400
6) SA = 340; V = 363.62

Cones:
1) SA = 75.4; V = 37.7 2) SA = 678.58; V = 1017.8
3) SA = 731.07; V = 678.58 4) SA = 1130.97; V = 2513.27
5) SA = 282.74; V = 314.15 6) SA = 485.41; V = 536.16

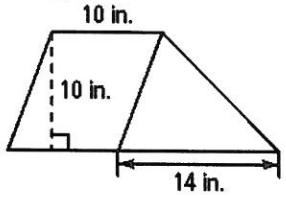
Spheres:
1) SA = 314.15; V = 523.59 2) SA = 339.29; V = 452.38
3) SA = 2412.74; V = 8578.64 4) SA = 201.06; V = 268.08
5) SA = 361.28; V = 575.95 6) V = 243.92 7) V = 9202.77
8) SA = 2827.43

Composite Solids:
1) 2365.5 2) 15079.6 3) 1213.8

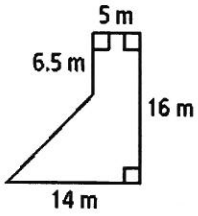
Name: _____ Unit 8 Review

1) Find the areas of the following figures.

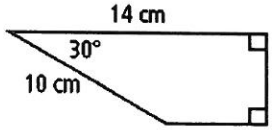
a. (parallelogram and triangle)



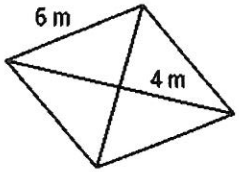
b.



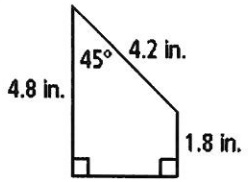
c. (trapezoid)



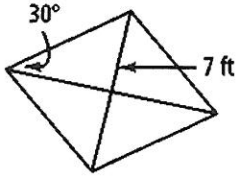
d. (rhombus)



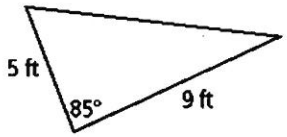
e. (trapezoid)



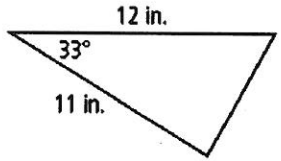
f. (rhombus)



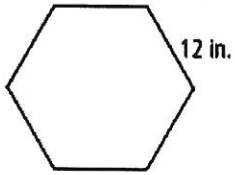
g.



h.

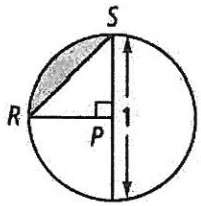


i. Regular hexagon

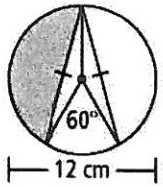


2) Find the area of the shaded region.

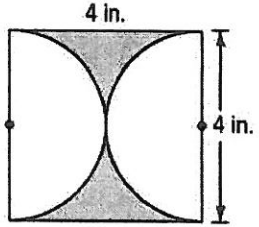
a.



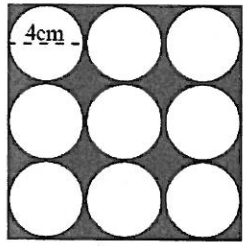
b.



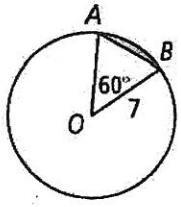
c.



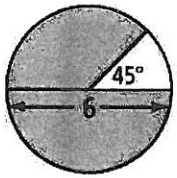
d.



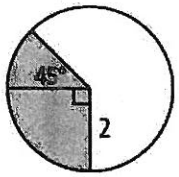
e.



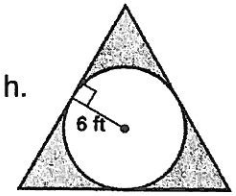
f.



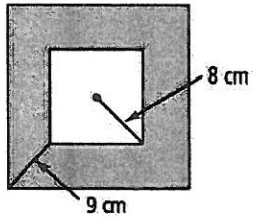
g.



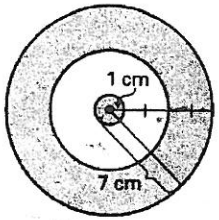
h.



i.



j.



3) Your math teacher draws a regular hexagon with a circle circumscribed around it. The radius of the circle is 5 m. To the near tenth, what is the area of the hexagon?

4) An equilateral triangle has a perimeter of 36 cm. Find its area to t nearest tenth.

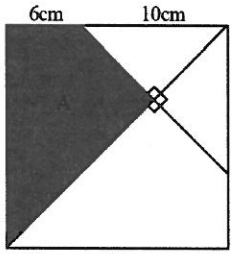
5) The perimeter of a square is $12\sqrt{2}$. Find the area of the square.

6) The longer base of a right trapezoid is 12 ft. The longer base of a similar right trapezoid is 30 ft. The area of the smaller right trapezoid is 20 ft^2. What is the area of the larger right trapezoid?

7) Two similar parallelograms have areas 125 m^2 and 80 m^2. The height of the larger parallelogram is 10 m. What are the sum of the lengths of the bases of both parallelograms?

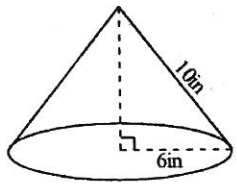
8) Find the area of a triangle with side length 18, 20, 22

9) Find the shaded area (large figure is a square).

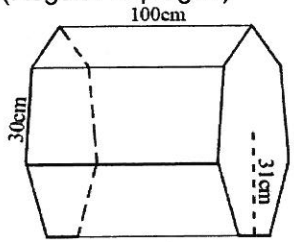


2) Find the surface area of the solids below.

a.



b. (Regular heptagon)



c. **Square Pyramid:**