Math Practice - Grade 8

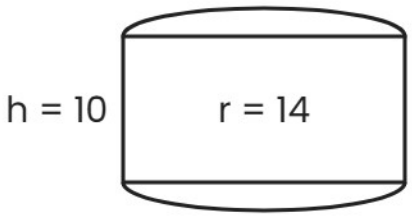
M11 Volume of cylinders, cones, spheres

M11 8.G.C.9

Name: _____ Date: _____

Find the volume of a cylinder, cone, or sphere from its radius and height. Find a missing dimension when the volume is given. Show that a cone is one third of a cylinder with the same base and height.

1 **Find the volume of the cylinder. Use pi = 22/7.**



Use pi = 22/7

Volume ☐

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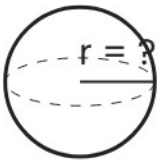
2 **The volume of the sphere is 904.32. Use pi = 3.14. Find the missing radius.**



Use pi = 3.14

Radius ☐

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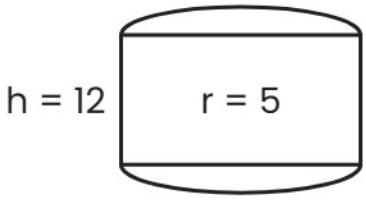
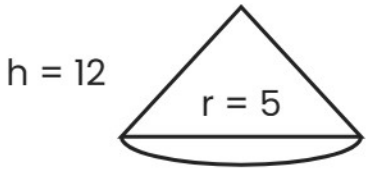
3 **Use pi = 3.14. A cylinder holds 942 cubic units. A cone has the same base and height. How much does the cone hold?**



Cylinder



Cone

Cone volume ☐

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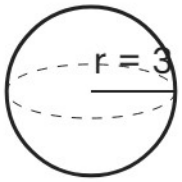
1 **Find the volume of the sphere. Use pi = 3.14.**



Use pi = 3.14

Volume ☐

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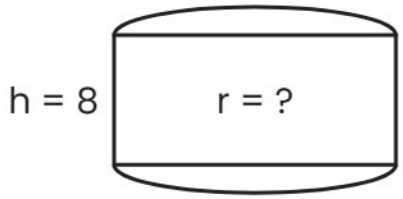
2 **The volume of the cylinder is 401.92. Use pi = 3.14. Find the missing radius.**



Use pi = 3.14

Radius ☐

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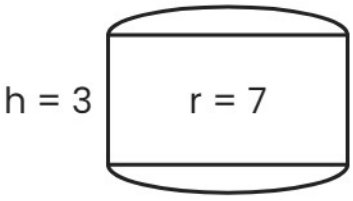
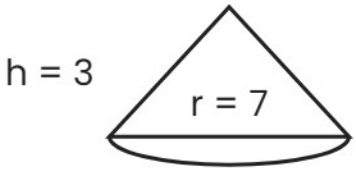
3 **Use pi = 22/7. A cone holds 154 cubic units. A cylinder has the same base and height. How much does the cylinder hold?**



Cylinder



Cone

Cylinder volume ☐

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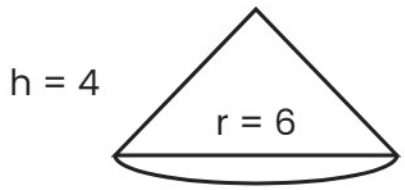
1 **Find the volume of the cone. Use pi = 3.14.**



Use pi = 3.14

Volume ☐

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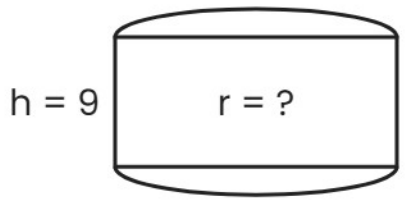
2 **The volume of the cylinder is 113.04. Use pi = 3.14. Find the missing radius.**



Use pi = 3.14

Radius ☐

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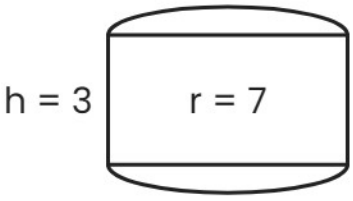
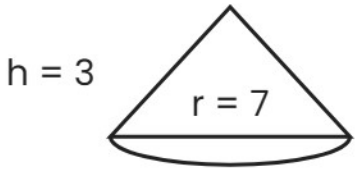
3 **Use pi = 22/7. A cylinder holds 462 cubic units. A cone has the same base and height. How much does the cone hold?**



Cylinder



Cone

Cone volume ☐