

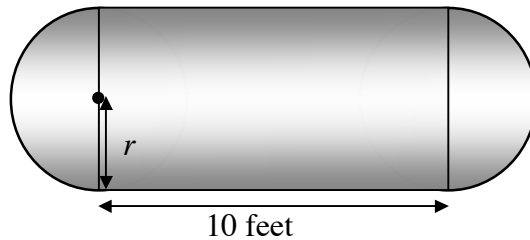
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## Propane Tanks

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People who live in isolated or rural areas have their own tanks of natural gas to run appliances like stoves, washers, and water heaters.

These tanks are made in the shape of a cylinder with hemispheres on the ends.



The Insane Propane Tank Company makes tanks with this shape, in different sizes.

The cylinder part of every tank is exactly 10 feet long, but the radius of the hemispheres,  $r$ , will be different depending on the size of the tank.

The company want to double the capacity of their standard tank, which is 6 feet in diameter.

What should the radius of the new tank be? \_\_\_\_\_

Explain your thinking and show your calculations.

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## Propane Tanks (continued)