## Cylinders

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- A cylinder is a solid figure, bounded by two equal, parallel circles, and by a curved surface, formed by moving a straight line of fixed length so that its ends always lie on the two parallel circles.


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- A carpenter would need to know how to calculate the volume of a cylinder when using concrete to set fence posts or when setting a cylindrical footing for a structure.



## Volume of a Cylinder

- To calculate the volume of a cylinder, you must first calculate the area of the end.
- Then you simply multiply the area of the end by the height of the cylinder.



## Volume of a Cylinder

- First find the area of the circle:

$$
A=\pi r^{2}
$$

- Then multiply the area by the length to find the volume.
$\mathrm{V}=\mathrm{AL}$


