

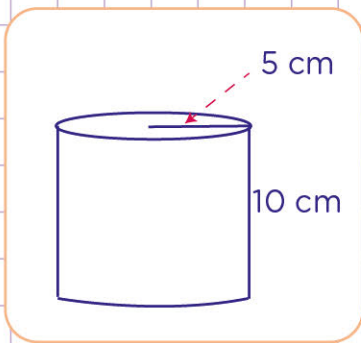
Name: Class:

Volume and surface area of cylinders.

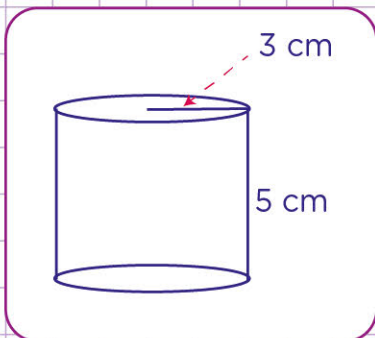


Find the volume of this cylinder. Use 3.14 for π . Round your answer to the nearest hundredth

Formula for volume of cylinder = area x height



Find the surface area of this cylinder. Use 3.14 for π .

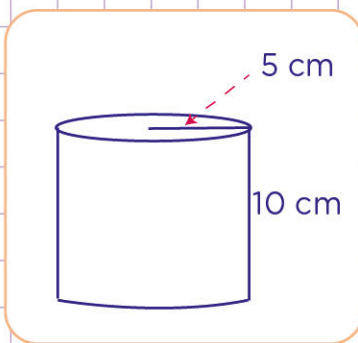


Name: Class:

Volume and surface area of cylinders.

Find the volume of this cylinder. Use 3.14 for π . Round your answer to the nearest hundredth

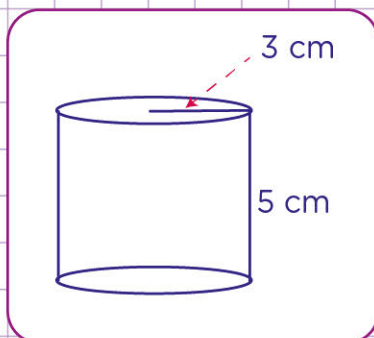
Formula for volume of cylinder = area x height



$$\begin{aligned} \text{Area of circle} &= \pi r^2 \\ r &= 5 \text{ cm and } \pi = 3.14 \\ \text{Area} &= 3.14 \times 5 \text{ cm} \times 5 \text{ cm} \\ &= 78.5 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \text{Volume of cylinder} &= \text{area} \times \text{height} \\ \text{Area} &= 78.5 \text{ cm}^2 \\ \text{Height} &= 10 \text{ cm} \\ \text{Volume} &= 78.5 \text{ cm}^2 \times 10 \text{ cm} \\ &= 785 \text{ cm}^3 \end{aligned}$$

So the volume of the cylinder is 785 cubic centimeters.

Find the surface area of this cylinder. Use 3.14 for π .

$$\begin{aligned} \text{Area of circle} &= \pi r^2 \\ \text{Since the 2 circles have the same radius, the area will be 2 times more} \\ \text{So area of our cylinder will be} &= (2 \times (\pi r^2)) \\ r &= 3 \text{ cm and } \pi = 3.14 \\ \text{Area} &= (2 (3.14 \times 3 \text{ cm} \times 3 \text{ cm})) \\ \text{Area} &= 56.52 \text{ cm}^2 \end{aligned}$$

So the surface area of the cylinder is 56.52 square centimeters.

