

7.3

Volume of a Cylinder

MathLinks 8, pages 262–267

Key Ideas Review

Choose from the following terms to complete #1 to #3.

area

circle

cylinder

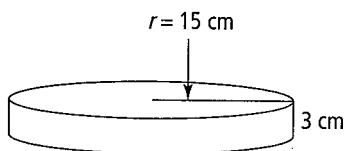
volume

- The shape of the base of a cylinder is a _____.
- The formula for the _____ of a _____ is $A = \pi \times r^2$.
- The formula for the _____ of a _____ is $V =$ _____ of the base \times height.

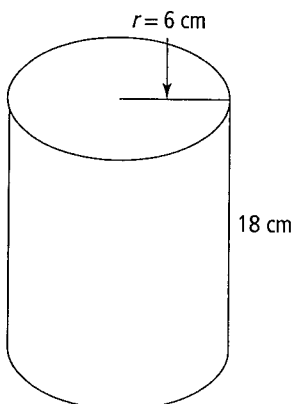
Practise and Apply

- Determine the volume of each cylinder. Express your answer to the nearest hundredth.

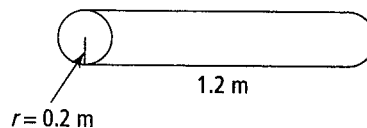
a)



b)



c)



- Calculate the volume of each cylinder. Express your answer to the nearest hundredth,

a) radius = 7 cm, height = 10 cm

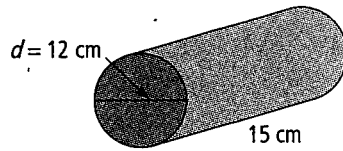
b) height = 3.2 m, radius = 1.2 m

Name: _____

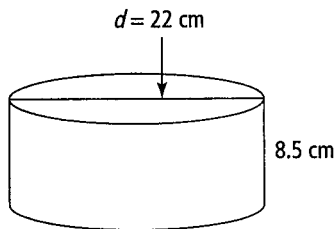
Date: _____

6. Determine the volume of each cylinder.

a)



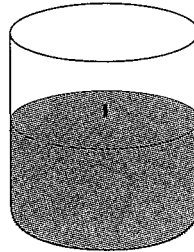
b)



- c) diameter = 4 m
height = 9 m

- d) height = 32.5 cm
diameter = 14 cm

7. Jade makes candles for the school craft sale. The candle mould she uses has a radius of 5 cm and a height of 6 cm.



- a) How much wax does she need to fill the mould each time?

- b) If she uses 628 cm^3 of wax, how tall must the new candle mould be if the radius is 5 cm? Show your thinking.

8. How much soil will you need to fill the semi-circular planter? Express your answer to the closest thousandth.

