Name: _____ Date: _____

5.4 Surface Area of a Cylinder

***MathLinks 8*, pages 182–187**

Key Ideas Review

Choose from the following terms to complete #1.

3-D object	add	area	circumference	cylinder

1. Complete each statement.

a) To find the surface area of a cylinder, you _____ the _____ of each face of the object.

b) A net of a _____ is made up of three faces.

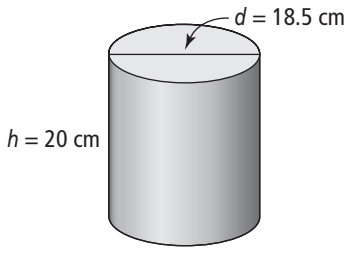
c) The rectangle in the net of a cylinder uses the _____ of the circle as one dimension.

Practise and Apply

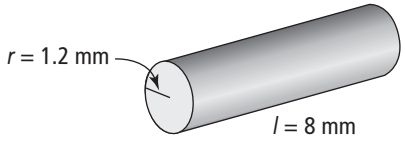
2. Sketch a net for this cylinder.

3. Estimate the surface area for each cylinder.

a)

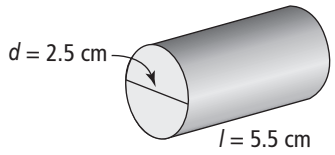


b)



Name: _____ **Date:** _____

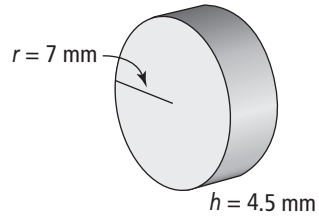
4. Calculate the surface area of this cylinder to the nearest hundredth of a square centimetre.



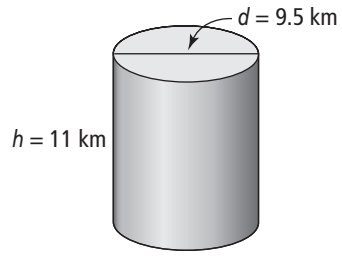
5. Use the following formula to find the surface area of each cylinder to the nearest hundredth of a square unit.

$SA = (2 \times \pi \times r^2) + (\pi \times d \times h)$

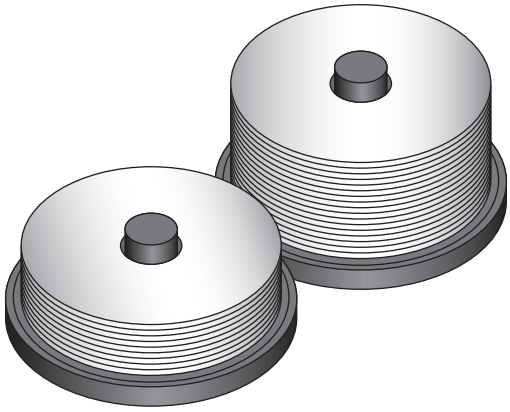
a)



b)



6. Recordable disks come in bulk packaging of various sizes.



A single compact disk has a diameter of 12 cm and a width of 0.1 cm.

a) Calculate the surface area of one compact disk to the nearest tenth of a centimetre squared.

b) Calculate the surface area of a bulk container that holds 50 compact disks. Explain your reasoning.