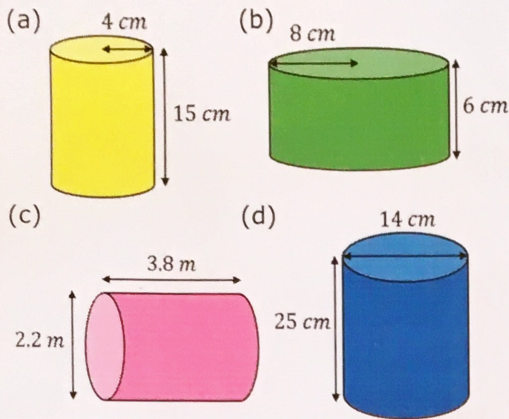


## Volume and Surface Area of Cylinders

Find the volume and total surface area of each of these cylinders.



$$(a) \quad V = 754.0 \text{ cm}^3$$

$$A = 477.5 \text{ cm}^2$$

$$(b) \quad V = 1206.4 \text{ cm}^3$$

$$A = 703.7 \text{ cm}^2$$

$$(c) \quad V = 14.4 \text{ m}^3$$

$$A = 33.9 \text{ m}^2$$

$$(d) \quad V = 3848.5 \text{ cm}^3$$

$$A = 1407.4 \text{ cm}^2$$

(a) Find the volume and surface area of a soup tin with a radius of 4.5 cm and a height of 12.5 cm.

(b) Find the volume and **curved** surface area of a glue stick with a diameter of 26 mm and a height of 70 mm.

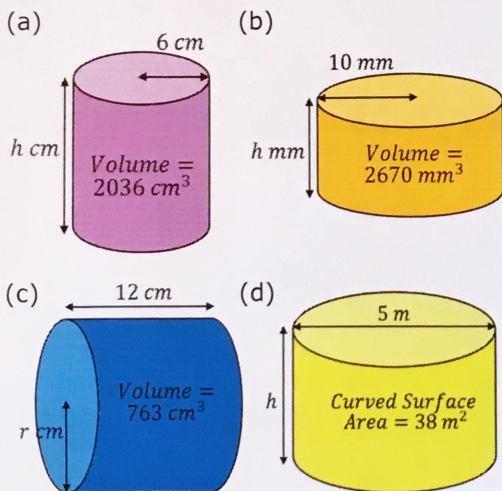
$$(a) \quad V = 795.2 \text{ cm}^3$$

$$A = 480.7 \text{ cm}^2$$

$$(b) \quad V = 37165.0 \text{ mm}^3$$

$$CA = 5717.7 \text{ mm}^2$$

Find the missing lengths.



$$(a) \quad h = 18 \text{ cm}$$

$$(b) \quad h = 8.5 \text{ mm}$$

$$(c) \quad r = 4.5 \text{ cm}$$

$$(d) \quad h = 2.42 \text{ m}$$

A cylinder has a height of 16 cm and a curved surface area of  $452 \text{ cm}^2$ . Find its volume.

$$r = 3 \text{ cm}$$

$$V = 452 \text{ cm}^3$$