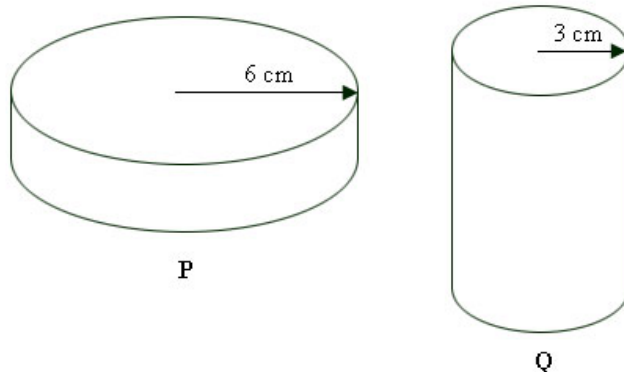


# Cylinders with the same volume

This task is about working out the height of two cylinder shapes given the volume and the radius.

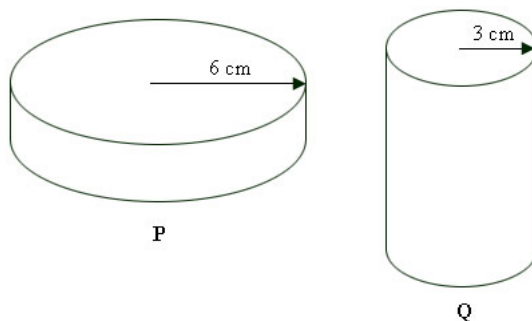
The two cylinders below each contain  $226 \text{ cm}^3$  of liquid.



What is the height of each cylinder if the measurements are as shown?  
Use  $\pi = 3.14$  approx.

- a) Height of P :  cm  
b) Height of Q :  cm

The two cylinders below each contain  $226 \text{ cm}^3$  of liquid.



c) If the height of P was 5 cm and the height of Q was 20 cm, which statement below would be correct about the radius of each cylinder, if the volume was the **same**?

(A) Radius of P is the same as the radius of Q.

(B) Radius of P is half the radius of Q.

(C) Radius of P is twice the radius of Q.

(D) Radius of P is four times the radius of Q.

(E) Nothing definite can be said without more information.