

# The answer of the question3 at P40

**a**

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## International System (SI) Units

from the table we can find that the unit of  $r$  is meter(m),according to the formula  $V = \frac{4r^3}{3\pi}$  we can find that the unit of  $V$  is three to the power of  $r$ , which means that the unit of  $V$  is  $m^3$   
according to the table, $m^3$  is the true answer

## U.S. Customary Units

from the table we can find that the unit of 'r' is feet(ft),according to the formula  $V = \frac{4r^3}{3\pi}$  we can find that the unit of  $V$  is three to the power of  $r$ , which means that the unit of  $V$  is  $ft^3$   
according to the table, $ft^3$  is the true answer

**b**

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according to the fomula,we could find that:

$$V = \frac{4 * 4^3}{3\pi} = \frac{256}{3}\pi \approx 268.08$$

**c**

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## inputs

my inputs will be  $r$ ,becuase in the formula, only  $V$  and  $r$  are unknowns. If  $V$  is required, you must enter  $r$

## outputs

according to the question,my outputs will be  $V$

## algorithm

I will write my code according to the formula