

Tugas Pertemuan 51

Volume Gabungan Tabung dan Bola

Nama :

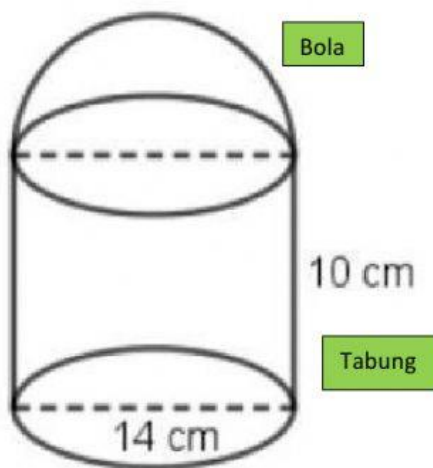
Kelas :

Materi

$$V. \text{ Tabung} = \pi \times r \times r \times t$$

$$V. \text{ Bola} = \frac{4}{3} \pi \times r \times r \times r$$

Contoh :



Hitung volume bangun ruang di samping!

V. Bola

Diketahui : $r = 7 \text{ cm}$, $t = 10 \text{ cm}$

Ditanyakan : volume bola, volume tabung

Dan volume gabungan

Jawab: $V. \text{ Bola} = \frac{4}{3} \pi \times r \times r \times r$

$$V. \text{ Bola} = \frac{4}{3} \times \frac{22}{7} \times 7 \times 7 \times 7$$
$$= 1.437,33 \text{ cm}^3$$

Karena bola hanya $\frac{1}{2}$ bagian, jadi V. Bola:

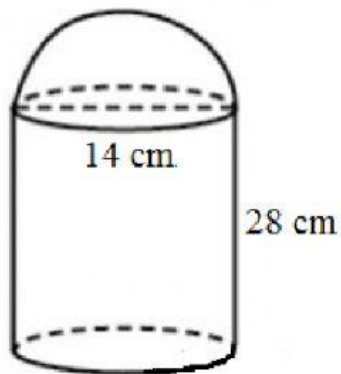
$$\frac{1}{2} \times 1.437,33 = 718,66 \text{ cm}^3$$

$$V. \text{ Tabung} = \pi \times r \times r \times t$$

$$= \frac{22}{7} \times 7 \times 7 \times 10 = 1.540 \text{ cm}^3$$

$$V. \text{ Gabungan} = 718,66 \text{ cm}^3 + 1.540 \text{ cm}^3 = 2.258,66 \text{ cm}^3$$

Latihan Soal



1. V. Bola

Rumus : $\frac{4}{3} \pi \times r \times r \times r$

V. Bola = $\frac{4}{3} \times \frac{22}{7} \times \dots \times \dots \times \dots = \dots, 33 \times \frac{1}{2} = \dots, 66 \text{ cm}^3$

2. V. Tabung

Rumus : $\pi \times r \times r \times t$

V. Tabung = $\frac{22}{7} \times \dots \times \dots \times \dots = \dots \text{ cm}^3$

3. V. Gabungan = V. Bola + V. Tabung

= $\dots \text{ cm}^3 + \dots \text{ cm}^3$

= $\dots \text{ cm}^3$