

## 立体の体積 解答と解説

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1 解答 (1)  $75\pi \text{ cm}^3$  (2)  $54 \text{ cm}^3$  (3)  $35 \text{ cm}^3$  (4)  $32 \text{ cm}^3$  (5)  $48 \text{ cm}^3$

(1) 求める体積は

$$\frac{1}{3} \times \pi \times 5^2 \times 9 = 75\pi (\text{cm}^3)$$

(2) 求める体積は

$$\frac{1}{2} \times 3 \times 6 \times 6 = 54 (\text{cm}^3)$$

(3) 求める体積は

$$\frac{1}{3} \times \frac{1}{2} \times 6 \times 5 \times 7 = 35 (\text{cm}^3)$$

(4) 求める体積は

$$\frac{1}{3} \times 4 \times 4 \times 6 = 32 (\text{cm}^3)$$

(5) 求める体積は

$$\frac{1}{2} \times (3+5) \times 2 \times 6 = 48 (\text{cm}^3)$$

2 解答 (1)  $24 \text{ cm}^3$  (2)  $\frac{256}{3}\pi \text{ cm}^3$

(1) 求める体積は

$$\frac{1}{3} \times 3 \times 4 \times 6 = 24 (\text{cm}^3)$$

(2) 求める体積は

$$\frac{4}{3}\pi \times 4^3 = \frac{256}{3}\pi (\text{cm}^3)$$