

## 수학 공간과 모양 6. 도형의 측정

아이디:

이름:

1 ③ [7점]

[해설]

$$\pi \times 8^2 \times \frac{45}{360} = 8\pi (\text{cm}^3)$$

2 ② [7점]

[해설]

$$\pi \times 6^2 \times \frac{210}{360} = 21\pi (\text{cm}^3)$$

3 ② [7점]

[해설]

$$2\pi \times 3 \times \frac{60}{360} = \pi (\text{cm})$$

4 ④ [7점]

[해설]

$$\frac{1}{2} \times 10 \times 16\pi = 80\pi (\text{cm}^3)$$

5 ② 7점]

[해설]

$$\frac{1}{2} \times (12 + 2) \times 5 \times 15 = 525 (\text{cm}^3)$$

6 ⑤ [7점]

[해설]

$$9 \times 9 + \left(\frac{1}{2} \times 9 \times 12\right) \times 4 = 297 (\text{cm}^2)$$

7 ③ [7점]

[해설]

$$9\pi + \frac{1}{2} \times 5 \times 6\pi = 24\pi (\text{cm}^2)$$

8 ② [7점]

[해설]

$$2^2\pi \times 5 = 20\pi (\text{cm}^3)$$

9 ④ [7점]

[해설]

$$9 \times 8 \times \frac{1}{2} \times 4 = 144 (\text{cm}^3)$$

[7점]

[6점]

10 ⑤

[해설]

$$\pi \times 6^2 \times \frac{60}{360} \times 3 = 18\pi (\text{cm}^3)$$

[6점]

11 ①

[해설]

$$\frac{4}{3}\pi \times 2^3 = \frac{32}{3}\pi (\text{cm}^3)$$

[6점]

12 ④

[해설]

$$4\pi \times 6^2 = 144\pi (\text{cm}^3)$$

[6점]

13 ②

[해설]

$$\frac{1}{2} \times 4\pi \times 6^2 = 72\pi (\text{cm}^3)$$

14 ③

[해설]

$$\frac{1}{2} \times \frac{4}{3} \times \pi \times 3^3 = 18\pi (\text{cm}^3)$$

[6점]

15 ③

[해설]

$$\frac{4}{3}\pi \times 1^3 = \frac{4}{3}\pi (\text{cm}^3), \quad \frac{4}{3}\pi \times 3^3 = 36\pi (\text{cm}^3) \text{이므로}$$

$$36\pi - \frac{4}{3}\pi = \frac{104}{3}\pi (\text{cm}^3)$$