

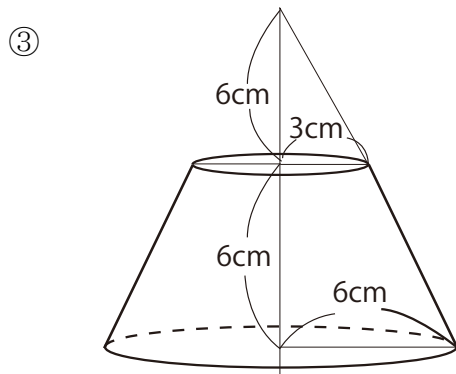
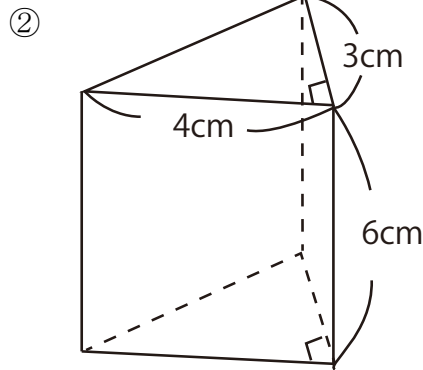
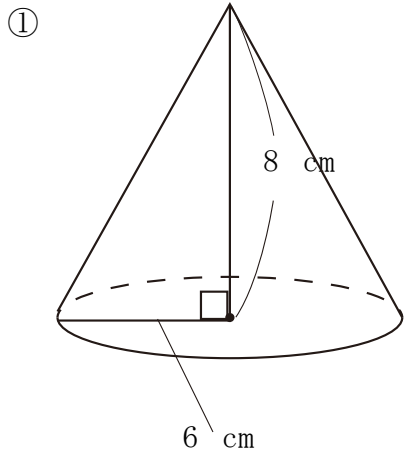
立体の体積

NO. 1

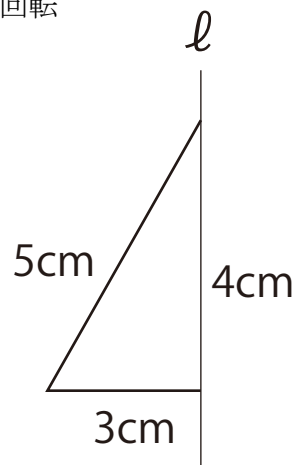
名前	
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／4 点

1 次の立体の体積を求めなさい。



2 右図の直角三角形を直線 l を回転軸として回転させて出来る立体の体積を求めなさい。



解答

1

$$\textcircled{1} \quad \pi \times 6^2 \times 8 \times \frac{1}{3} = 96 \pi \text{ (cm}^3\text{)}$$

$$\textcircled{2} \quad \frac{1}{2} \times 3 \times 4 \times 6 = 36 \text{ (cm}^2\text{)}$$

$$\textcircled{3} \quad \pi \times 6^2 \times 12 \times \frac{1}{3} = 144 \pi \text{ (cm}^3\text{)} \quad \leftarrow \text{全体}$$

$$\pi \times 3^2 \times 6 \times \frac{1}{3} = 18 \pi \text{ (cm}^3\text{)} \quad \leftarrow \text{上側}$$

$$144 \pi - 18 \pi = 126 \pi \text{ (cm}^3\text{)}$$

2

$$\pi \times 3^2 \times 4 \times \frac{1}{3} = 12 \pi \text{ (cm}^3\text{)}$$