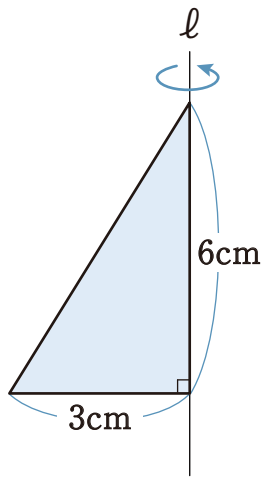
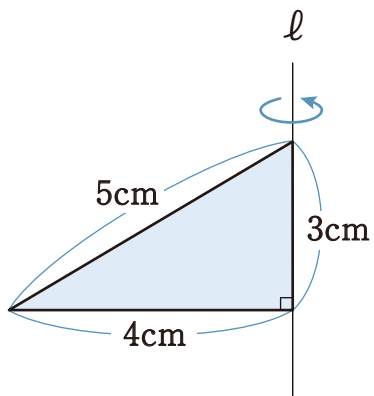


1 次の図形を、直線  $l$  で1回転させた時にできる立体の体積を求めなさい。

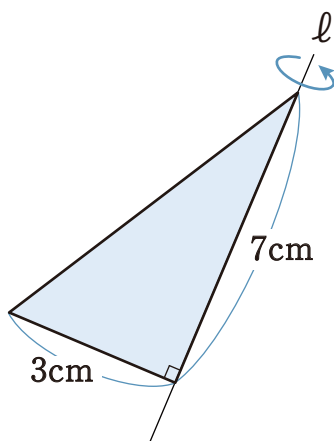
①



②

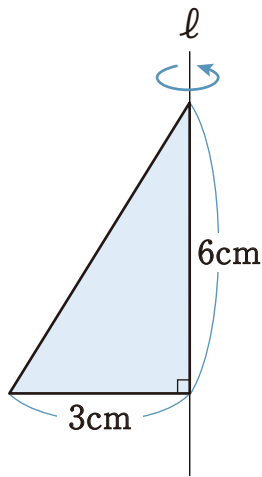


③



1 次の図形を、直線  $l$  で1回転させた時にできる立体の体積を求めなさい。

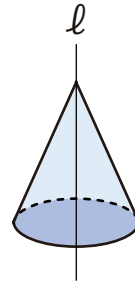
①



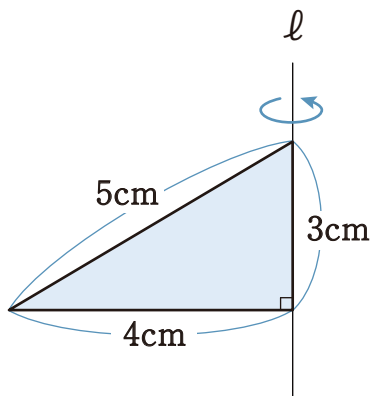
$$18\pi \text{ cm}^3$$

$$\text{底面積は } \pi \times 3^2 = 9\pi \text{ cm}^2$$

$$\text{体積は } \frac{1}{3} \times 9\pi \times 6 = 18\pi \text{ cm}^3$$



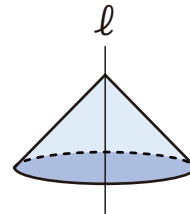
②



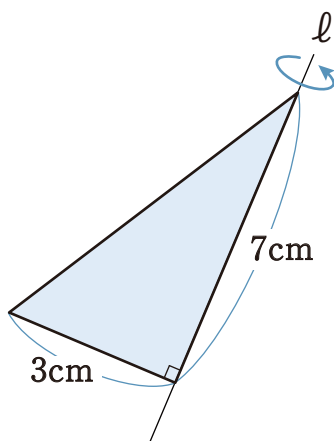
$$16\pi \text{ cm}^3$$

$$\text{底面積は } \pi \times 4^2 = 16\pi \text{ cm}^2$$

$$\text{体積は } \frac{1}{3} \times 16\pi \times 3 = 16\pi \text{ cm}^3$$



③



$$21\pi \text{ cm}^3$$

$$\text{底面積は } \pi \times 3^2 = 9\pi \text{ cm}^2$$

$$\text{体積は } \frac{1}{3} \times 9\pi \times 7 = 21\pi \text{ cm}^3$$

