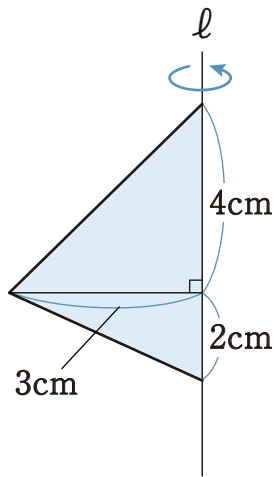
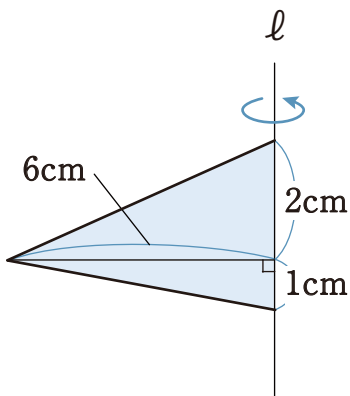


1 次の図形を、直線  $l$  で1回転させた時にできる立体の体積を求めなさい。

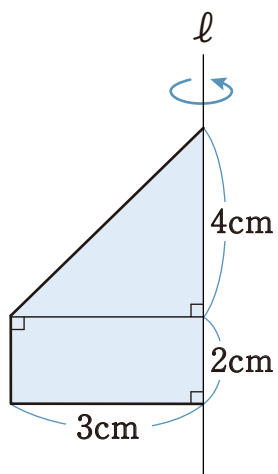
①



②

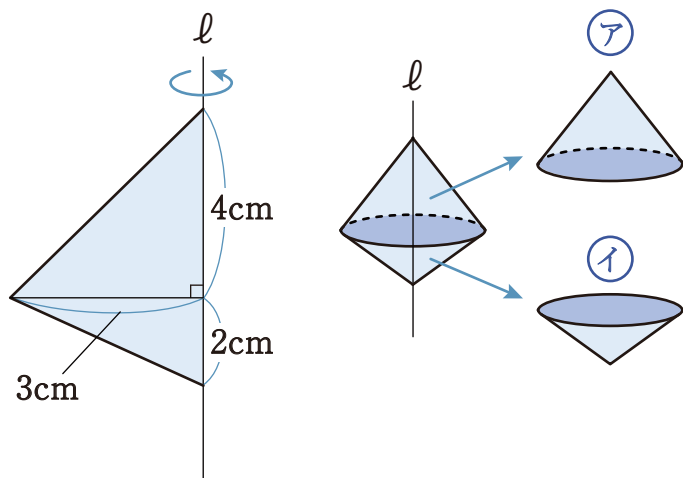


③



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



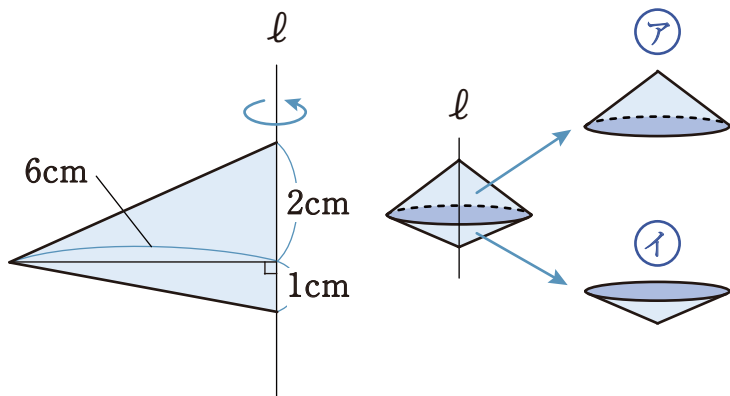
$18\pi\text{ cm}^3$

$\frac{1}{3} \times \pi \times 3^2 \times 4 = 12\pi \quad \dots \text{ア}$

$\frac{1}{3} \times \pi \times 3^2 \times 2 = 6\pi \quad \dots \text{イ}$

$12\pi + 6\pi = 18\pi\text{ cm}^3$

②



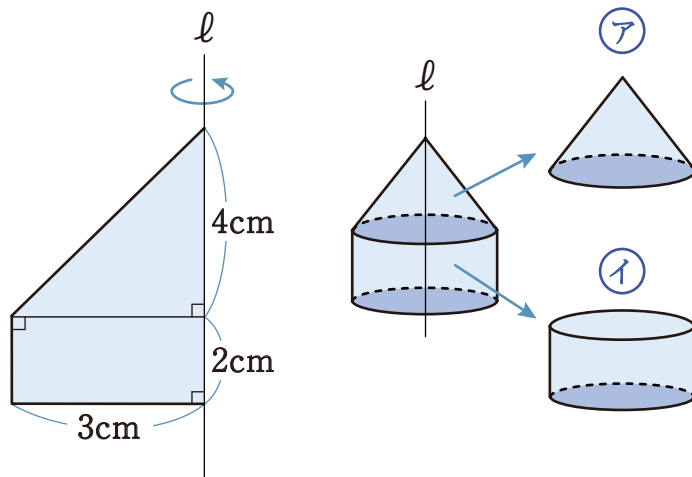
$36\pi\text{ cm}^3$

$\frac{1}{3} \times \pi \times 6^2 \times 2 = 24\pi \quad \dots \text{ア}$

$\frac{1}{3} \times \pi \times 6^2 \times 1 = 12\pi \quad \dots \text{イ}$

$24\pi + 12\pi = 36\pi\text{ cm}^3$

③



$30\pi\text{ cm}^3$

$\frac{1}{3} \times \pi \times 3^2 \times 4 = 12\pi \quad \dots \text{ア}$

$\pi \times 3^2 \times 2 = 18\pi \quad \dots \text{イ}$

$12\pi + 18\pi = 30\pi\text{ cm}^3$