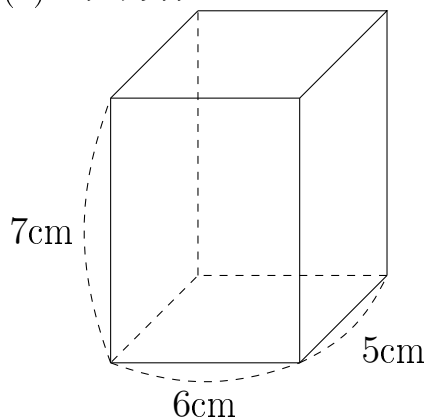


空間図形 [立体の体積(1)]

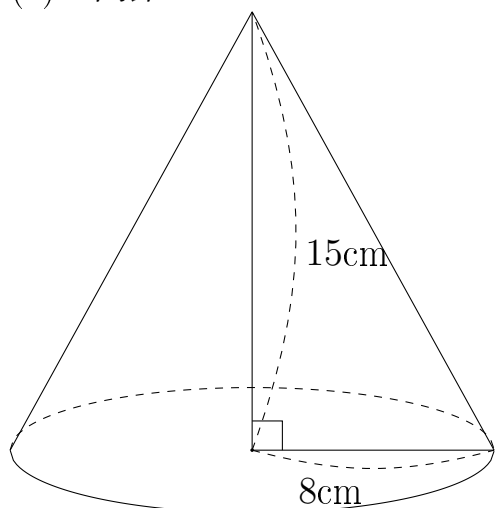
<演習問題>

次の立体の体積を求めよ。

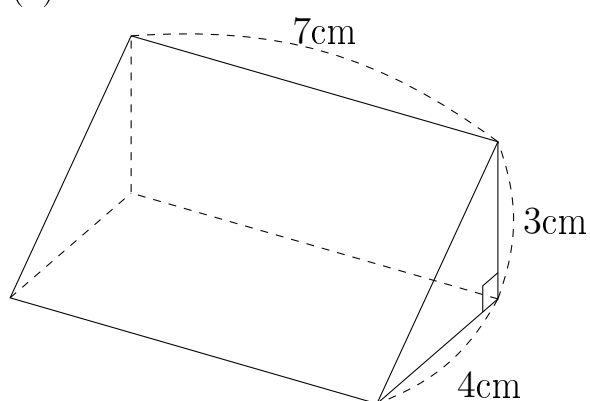
(1) 直方体



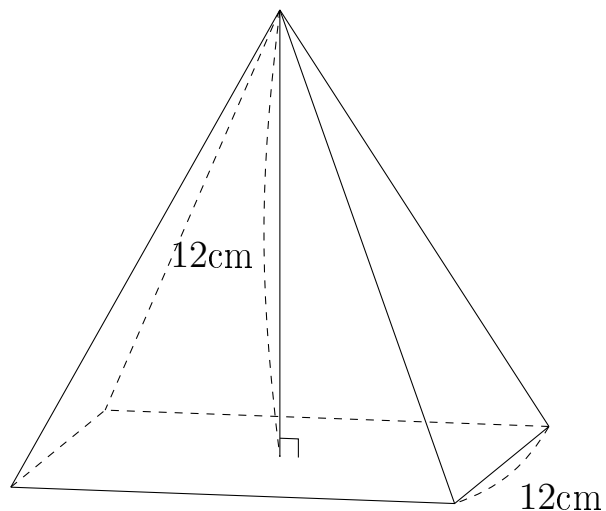
(2) 円錐



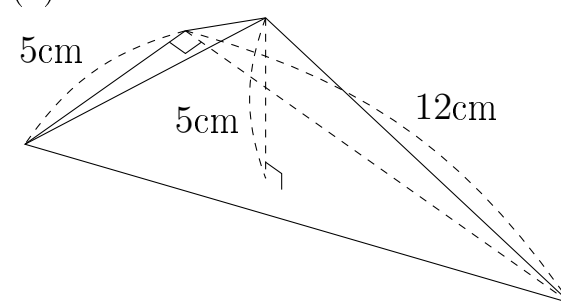
(3) 三角柱



(4) 正四角錐



(5) 三角錐



(6) 1辺の長さが2cmの立方体

(7) 底面の半径が6cmで、 高さが10cmの円柱

(8) 半径が9cmの球

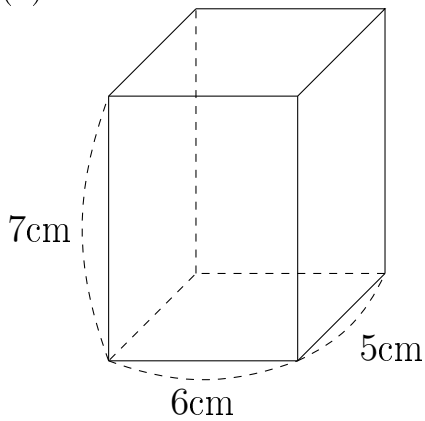
(9) 半径が6cmの半球

空間図形 [立体の体積(1)]

<演習問題>

次の立体の体積を求めよ。

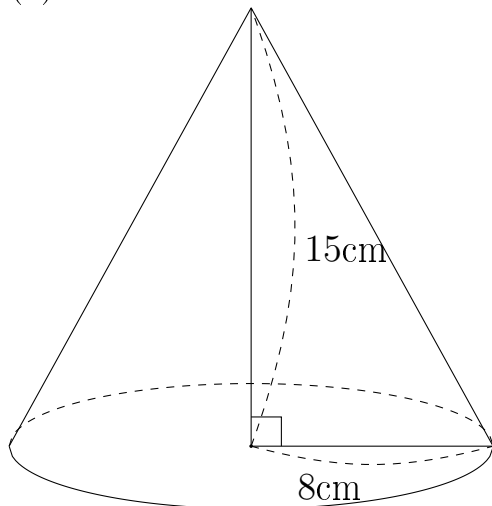
(1) 直方体



$$5 \times 6 \times 7 = 210$$

$$210 \text{ cm}^3$$

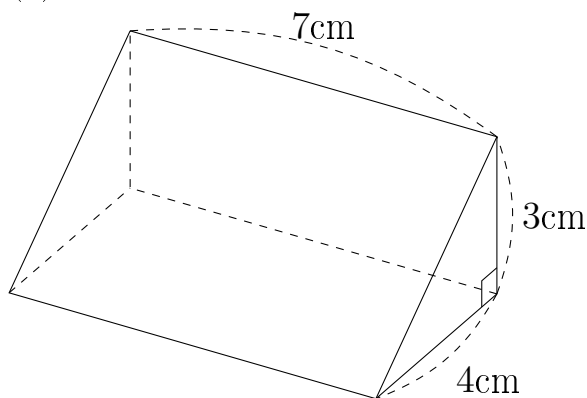
(2) 円錐



$$\frac{1}{3} \times \pi \times 8^2 \times 15 = 320\pi$$

$$320\pi \text{ cm}^3$$

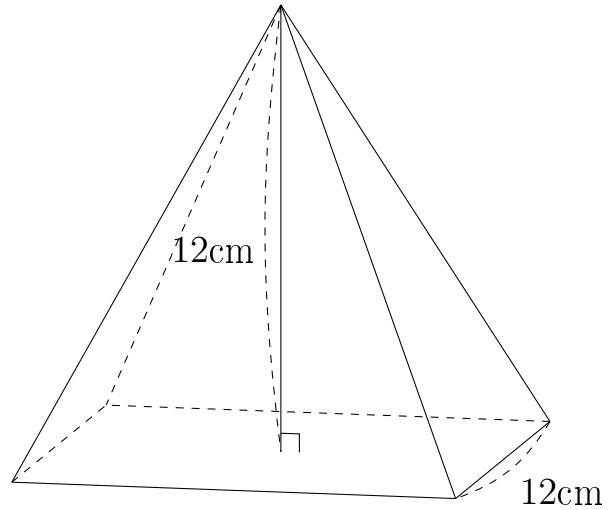
(3) 三角柱



$$\frac{1}{2} \times 3 \times 4 \times 7 = 42$$

$$42 \text{ cm}^3$$

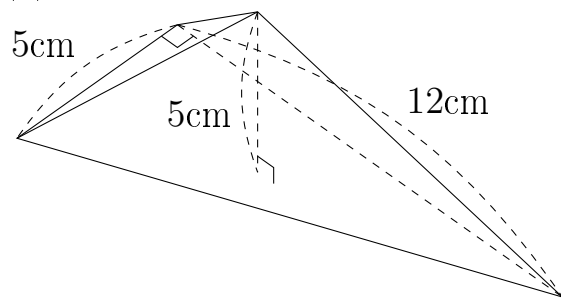
(4) 正四角錐



$$\frac{1}{3} \times 12 \times 12 \times 12 = 576$$

$$576 \text{ cm}^3$$

(5) 三角錐



$$\frac{1}{3} \times \frac{1}{2} \times 5 \times 12 \times 5 = 50$$

$$50 \text{ cm}^3$$

(6) 1辺の長さが2cmの立方体

$$2 \times 2 \times 2 = 8$$

$$8 \text{ cm}^3$$

(7) 底面の半径が6cmで、 高さが10cmの円柱

$$\pi \times 6^2 \times 10 = 360\pi$$

$$360\pi \text{ cm}^3$$

(8) 半径が9cmの球

$$\frac{4}{3} \times \pi \times 9^3 = 972\pi$$

$$972\pi \text{ cm}^3$$

(9) 半径が6cmの半球

$$\frac{4}{3} \times \pi \times 6^3 \times \frac{1}{2} = 144\pi$$

$$144\pi \text{ cm}^3$$