

<解> PART29

(ア) (両辺を6倍) $2x+6=-3x+18$

$$5x=12$$

$$x=\underline{\underline{\frac{12}{5}}}$$

(イ) (与式) $= -\frac{8^2 a^2 b^3}{4ab^2}$
 $= \underline{\underline{-2ab}}$

(ウ) (与式) $= 2(9a^2 - b^2)$
 $= \underline{\underline{2(3a+b)(3a-b)}}$

(エ) (与式) $= 10\sqrt{3} - 2\sqrt{3}$
 $= \underline{\underline{8\sqrt{3}}}$

(オ) y は x に反比例 $\rightarrow a = xy = 5 \times 3 = 15$

$xy = 15$ に $x = 2$ を代入して、 $y = \underline{\underline{\frac{15}{2}}}$

(カ) $9x + 4y = 4$

$-) \quad 9x + 30y = -9$
 $\hline -26y = 13$

$$\underline{\underline{y = -\frac{1}{2}}} \quad \underline{\underline{x = \frac{2}{3}}}$$

(キ) 半径を r とすると、

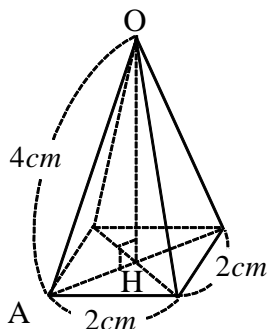
$$\pi r^2 \times \frac{72}{360} = 15\pi \text{ より}$$

$$\frac{1}{5} r^2 = 15$$

$$r^2 = 75$$

$$r = \pm 5\sqrt{3} \rightarrow \underline{\underline{r = 5\sqrt{3}cm}}$$

(ク)



左図で、 $AH = 2\sqrt{2} \times \frac{1}{2} = \sqrt{2}$

よって、 $OH = \sqrt{4^2 - (\sqrt{2})^2}$
 $= \underline{\underline{\sqrt{14}cm}}$