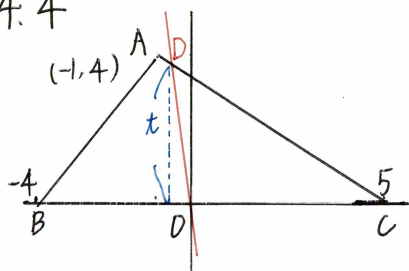


P84. 4



$$\triangle ABC = 9 \times 4 \times \frac{1}{2} = 18$$

$$\triangle DOC = \frac{1}{2} \triangle ABC = 9$$

$\triangle DOC$ の高さ (= Dのy座標) を t とする。

$$5 \times t \times \frac{1}{2} = 9$$

$$t = \frac{18}{5}$$

Dのx座標を求めるために ACの式を求める。

$$\frac{18}{5} = -\frac{2}{3}x + \frac{10}{3}$$

$$54 = -10x + 50$$

$$10x = -4$$

$$x = -\frac{2}{5}$$

$$\left(-\frac{2}{5}, \frac{18}{5}\right) \text{ を } y = ax \text{ に代入} \quad a = -9 \quad \underline{y = -9x}$$

$$AC \begin{cases} 4 = -a + b \cdots \textcircled{1} \\ 0 = 5a + b \cdots \textcircled{2} \end{cases}$$

$$\textcircled{1} - \textcircled{2} \quad 4 = -6a$$

$$a = -\frac{2}{3}$$

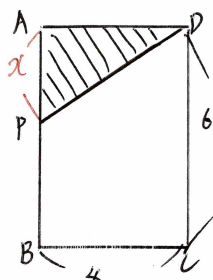
$$\textcircled{2} \text{ に代入} \quad 0 = -\frac{10}{3} + b$$

$$b = \frac{10}{3}$$

$$y = -\frac{2}{3}x + \frac{10}{3}$$

P88. 6 (1) ① AB上

$$0 \leq x \leq 6$$

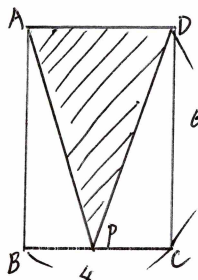


$$y = x \times 4 \times \frac{1}{2}$$

$$y = 2x$$

② BC上

$$6 \leq x \leq 10$$

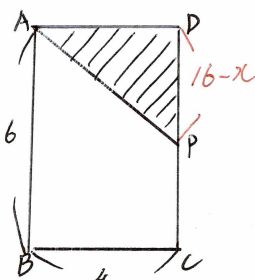


$$y = 4 \times 6 \times \frac{1}{2}$$

$$y = 12$$

③ CD上

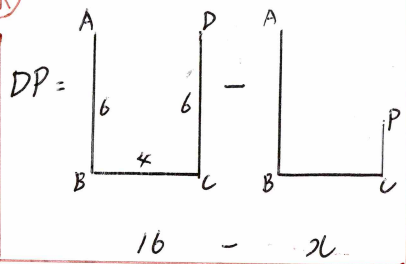
$$10 \leq x \leq 16$$



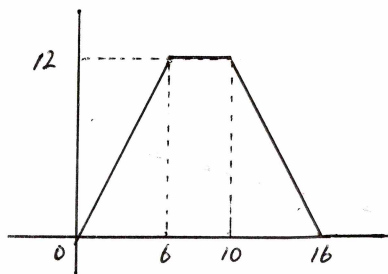
$$y = (16-x) \times 4 \times \frac{1}{2}$$

$$y = -2x + 32$$

※



(2)



(3) 12秒後はCD上にいるので ③の式に $x = 12$ 代入

$$y = -2 \times 12 + 32$$

$$y = 8$$

$$\underline{A. 8 \text{ cm}^2}$$

(4) 10 cm^2 になるのは AB上と CD上 なのだから ①と③の式に $y = 10$ 代入

$$10 = 2x$$

$$x = 5$$

$$10 = -2x + 32$$

$$x = 11$$

A. 5秒後, 11秒後