

10 3

$$a_1 + a_1 + d = 10$$

$$2a_1 + d = 10 \rightarrow 9.5$$

$$2a_1 < 9.5 \quad a_1 > 4.75$$

$$a_1 + 2d - a_1 = 3$$

$$2d = 3 \\ d = 1.5$$

$$\frac{40}{9} (9.5 + 5 \cdot 1.5)$$

(A)

$$\frac{a_1(1-\alpha^n)}{1-\alpha}$$

$$①+② \quad a_1 + a_3 + a_5 + \dots + a_{19} = 13 + 17$$

$$\underbrace{a_1 + a_3 + \dots + a_{19}}_{10\text{ terms}} = 30$$

$$a_1 \left(1 + \alpha^1 + \alpha^4 + \dots + \alpha^{18} \right) = 30$$

$$30 + a_{19} = 13$$

$$a_{19} = -17$$

⑤

$$\begin{aligned} r &= 2 \\ S_n &\approx \frac{a_1(1-r^n)}{1-r} \\ S_{10} &= \frac{2(1-2^n)}{2-1} \end{aligned} \quad \left| \begin{array}{l} 510 = -2(1-2^n) \\ -255 = 1-2^n \\ -256 \approx 2^n \\ 2^n \approx 256 \\ 2^n \approx 2^8 \\ n = 8 \end{array} \right.$$

$$6 \quad \frac{d}{dt} = \frac{-9}{(t+1)^2} \quad \Big| \quad = -0.5$$

$$\begin{aligned} \frac{dI}{dt} &= \frac{-\Phi}{(t+1)^2} \\ &= \frac{-\Phi}{(3+1)^2} \\ &\Rightarrow \frac{-\Phi}{16} \end{aligned}$$

8

$\frac{25}{100} A \rightarrow \frac{12.5}{100} B$	$120 = \frac{75A}{100} + \frac{47.5}{100} B$
$25A \rightarrow 12.5B$	$120 = \frac{75A}{100} + \frac{47.5}{100}(2A)$
$B \rightarrow 2A$	$75A + 175A$

$$B = 2A$$

$$120 \rightarrow \frac{95A + 175A}{100}$$

$$120 = \frac{250}{100} A$$

$$120 = 2.5A$$

$$A = AB$$

$$B = 2(AB)$$

$$B = 96$$

$$96 + 48 = 144 \quad \times$$

$$\text{No } 17 \quad \left(\begin{array}{l} wv_1 + 10n \\ wv \leq b \end{array} \right) \text{ and } wv \leq 24$$

$$\frac{4}{6} \times 100 = 66.67$$

$$\text{No } 18 \quad 63a + 14b + c \leq 486 \quad (63 \times 7) + (14 \times 3) + 3 \leq 486$$
$$(7 \times 9)a + (7 \times 2)b + c = 486$$

$$(7a + 2b) = 186 - c$$

$$9a + 2b \rightarrow \frac{186 - c}{7}$$

19 6 മുത്തുകൾ $9 \times 1 = 9$

6 ഒറ്റകൾ $1 \times 3 = 3$

6 മുത്തുകൾ $1 + 9 + 3 = 13$

$\frac{13}{99}$

भिन्न
४५७ - ५६

$$10 \quad \frac{56}{2120} \rightarrow \frac{56}{420} = \frac{2}{15}$$

$$12 \quad P(A) = \{\emptyset, \{\emptyset\}, \{0\}, \{\{0\}\}, \{\{\emptyset\}\}$$

$$P(A) - A \approx 16 - 3 \approx 13$$

$$A - P(A) \approx 1$$