

۱۹/۳۰

نام و نام خانوادگی کلاس پاسخنامه تشریحی تکلیف شماره کلاس

الف)	$d = 4$	$4n + 1$	۳	۱
ب)		$4 \times 10 + 1 = 41$		
الف)	$\frac{10}{p} (12 + 9d) = 5(12 + 36) = 5 \times 48 = 240$		۳	۲
ب)	$4 \times 1 = 32$	$a_{29} \text{ و } a_{32} \rightarrow 4n + 1 \rightarrow a_{29} = 111$ $\rightarrow a_{32} = 130$		
		$\frac{4}{p} (111 + 130) = 2 \times 241 = 482$		
۳	$1 + \sqrt{3} \text{ و } 2 \text{ و } 3 - \sqrt{3}$ $\frac{1 + \sqrt{3}}{1 - \sqrt{3}}$	$a_{2d} - a_{33} = ?$	۳	۳
		$a_{2d} - a_{33} = (a + 2d) - (a + 3d) = -d = 2(1 - \sqrt{3}) = 2 - 2\sqrt{3}$		
۴	$\omega^{2x} \text{ و } 3 \times \omega^{2x} \text{ و } \omega^y$ $\frac{\omega^{2x}}{1 + \omega^{2x}} + \frac{\omega^y}{1 + \omega^{2x}}$	$\omega \times \omega^{2x} = \omega^y$ $y = 2x + 1$ $y = 2 + 1 = 3$ $y = 3$	۳	۴
	$x \text{ و } 2 \text{ و } 2x + 1$ $\frac{x}{2x-1} + \frac{2}{2x-1}$	$2 - (2x - 1) = x$ $2 - 2x + 1 = x$ $3 - 2x = x$ $3 = 3x$ $x = 1$		
۵	$2x - 4 \text{ و } 2x - 1 \text{ و } 4x \text{ و } \dots$ $\frac{2x-4}{2} + \frac{2x-1}{2} + \dots$	$4x - 3 = 2x - 1$ $2x = 2$ $x = 1$	۳	۵
		$4x + 3$ $4(\frac{1}{2}) + 3 = 2 + 3 = 5$		

$3, 9, 15, 21, 27, 33, 39, \dots$ $2, 9, 16, 25, 36, 49, \dots$ $5, 11, 17, \dots \rightarrow 4n-1$ $+4+4$	$a_{10} \rightarrow 2a + a_{10} = 39$ $\neq 1$ $b_{10} \rightarrow 3a - 1 = b_{10} = 59$ $4n-1 \leq 39$ $4n \leq 40$ $n \leq 10$	$1, 2, 3, \dots$ $n \leq 4, 4$ $4, 4$ $4, 4$ $4, 4$	ϵ
$a_1, a_3, a_5 = 10d \rightarrow 3a + 4d = 10d \rightarrow a + a + 2d + a + 4d$ $a_1, a_2, a_3 \rightarrow 21 \rightarrow 3a + 3d = 21 \rightarrow a + a + d + a + 2d$ $a_3 - a_2 + a = a + 2d - a - d + a = a + d = -21 + 21 = 0$ $\frac{0}{-21} = \frac{1}{-3} \checkmark$	$a_1, a_3, a_5 = 10d \rightarrow 3a + 4d = 10d \rightarrow a + a + 2d + a + 4d$ $a_1, a_2, a_3 \rightarrow 21 \rightarrow 3a + 3d = 21 \rightarrow a + a + d + a + 2d$ $a_3 - a_2 + a = a + 2d - a - d + a = a + d = -21 + 21 = 0$ $\frac{0}{-21} = \frac{1}{-3} \checkmark$	$rd = 15$ $d = 21$ $a = -21$	γ
$1, d(a + a_3) = 1d$ $a + a + 2d = 10$ $2a + 2d = 10$ $a + d = 5$ $a = 5 - d$	$a_1 + a_3 = 2a + 2d = 2d$ $2(d - d) + 2d = 2d$ $10 - 2d + 2d = 2d$ $10 + 2d = 2d$ $2 + d = 5$ $a = 5 \Rightarrow d = 3$	$a_{10} = a + 9d$ $= 5 + 27 = 32 \checkmark$	λ
$f, d(2a + 1d) = 13, d(2a + 2d)$ $9a + 34d = 2va + 2vd$ $9d = 11a$ $d = 2a$ $a = \frac{d}{2}$	$\frac{a + 19d}{a + 4d} = \frac{19, d}{9, d} = \frac{19}{9} \checkmark$	$\frac{a + 19d}{a + 4d} = \frac{19, d}{9, d} = \frac{19}{9} \checkmark$	q
$a = 11$ $a + 4d = 3d$ $4d = 25$ $d = 5$	$a + 3d = 11 + 15 = 26$ $31 + (n-1)d = 26$ $31 + 3d = 26$ $3d = -5$ $d = -5$	$d = \frac{b-a}{n+1}$ $-d = \frac{13-31}{n+1}$ $-d = \frac{-18}{n+1}$ $n+1 = d$ $n = 5 \checkmark$	10