نام و نام خانوادگی ..... پاسخنامه تشریحی تکلیف شماره ..... کلاس .....

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$a_1^2 + d^2 + 2ad$ $6(a_1+d)(a_1+d) = 5(a_1+2d)(a) + 3(a_1+d)(a)$ $6a^2 + 6d^2 + 12ad = 5a^2 + 10da + 3a^2 + 3da$ $6a^2 + 6d^2 + 12ad = 8a^2 + 13ad$ $6d^2 = 2a^2 + ad$ $\frac{2a^2}{a^2} + \frac{ad}{a^2} - \frac{6d^2}{a^2} = 0$ $\quad 2 + \frac{d}{a} - \frac{6d^2}{a^2} = 0$ $6(\frac{d}{a})^2 - \frac{d}{a} - 2 = 0$ → $d/a_1 = \frac{2}{3}$, $-\frac{1}{2}$ $\frac{a_4}{d} = \frac{a_1+3d}{d} = \frac{a}{d} + 3$ $\frac{3}{2} + 3 = 4.5$ $-2 + 3 = 1$	۶
a , b , c ($+d$, $+d$) $b , \frac{1}{2}a , \frac{1}{4}c$ ($b-d$, $b+d$) $b , \frac{b-3b}{2} , \frac{b+3b}{4}$ $a = b - d$ $c = b + d$ $b , \frac{b-d}{2} , \frac{b+d}{4}$ $b , -b , b$ ($\times -1$, $\times -1$) $-1 \times 2 = -2$ $(\frac{b-d}{2})^2 = \frac{b(b+d)}{4} = \frac{b^2+d^2-2bd}{4} = \frac{b^2+bd}{4}$ $b^2 + d^2 = b^2 + 3bd \quad d^2 = 3bd \quad d = 3b$	۷
a , b , c $\frac{b}{q} , b , bq$ ($\times q$, $\times q$) $\frac{a_9}{a_6} = \frac{a_1q^8}{a_1q^5} = q^3 \quad (-4)^3 = -64$ $3b , 2a , c$ → $2\frac{b}{q}$, bq $\frac{3b+bq}{2} = \frac{2b}{q}$ $b(3+q) = \frac{4b}{q}$ $qb(3+q) = 4b$ $\quad q=-4$, $q=1$ (غ ق ق) جملات متمایز $q^2 + 3q - 4 = 0 \quad (q+4)(q-1) = 0$	۸
$\frac{a_1q^5}{a^4q^{10}} + \frac{aq'}{a\,a^2} = 2$ $\frac{a}{q} = \frac{a^2}{aq}$ → ① , ⓶ -2 $\frac{q^2}{a^2} + \frac{q}{a} = 2$ $\frac{q}{a} = 1 \quad \frac{q}{a} = -2$ $\frac{q^2}{a^2} + \frac{q}{a} - 2 = 0 \quad (\frac{q}{a} - 1)(\frac{q}{a} + 2) = 0$	۹
$a_3 = \sqrt{a_4}$ $a_1q^2 = \sqrt{a_1q^3} \to \sqrt{a_1q^2q}$ $a_1q^2 = q\sqrt{a_1q}$ $a_1q = \sqrt{a_1q}$ 1 $a_1q \times q^3 = 27 \quad q = 3$ $a \times 3 = 1$ $a = \frac{1}{3}$ $\frac{1}{2} - \frac{1}{3} = \frac{3}{6} - \frac{2}{6} = \frac{1}{6}$	۱۰

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$\sqrt{1} = 1$