

نام و نام خانوادگی: پاسخنامه تشریحی تکلیف شماره ۱۸۰ کلاس: ۴۵.۱۴۵.۱۴۵

$4 + aq + aq^2 = 21 \rightarrow a = \frac{f}{q} \rightarrow \frac{f}{q} (1 + q + q^2) = 21$ $a \cdot aq \cdot aq^2 = 4f$ $a^3 q^3 = 4f$ $(aq)^3 = 4f$ $aq = \sqrt[3]{4f}$	$\Delta = (-17)^2 - 4 \cdot 1 \cdot (1) = 289 - 4 = 285$ $f(1 + q + q^2) = 21q$ $f + fq + fq^2 = 21q$ $fq^2 - 17q + f = 0$ $q = \frac{17 \pm \sqrt{285}}{2}$	۱
$\frac{x^2 + f}{x^2 - 2} = \frac{x^2 - 2}{2x}$ $f x^2 = (x^2 + f)(x^2 - 2)$ $f x^2 = x^4 + f x^2 - 2x^2 - 2f$ $x^4 - 2x^2 - 2f = 0$	$x^2 - 2x - 1 = 0$ $(x + f)(x - 2)$ $x = 2 \rightarrow x = 2$ $q_1 = f + f = 1 \rightarrow 1 \left(1 - \frac{1}{f}\right) = 4(1 - \frac{1}{f})$	۲
$a_1 (1 + q + q^2 + q^3 + q^4) = a_1 + a_1 q + a_1 q^2 + a_1 q^3 + a_1 q^4$ $\frac{151}{21} \times 51^{\frac{f}{q}} = 292$	۳	۳
$\frac{45-1}{f} = \frac{45}{9} \rightarrow a_1 + \left(\frac{45}{9} \times 3\right) = 110 \times 3 + 1 = 331 \rightarrow \frac{45}{f} = 4$ $q^4 = \frac{45}{1} = 45 = 2^2$ $a_1 q^2 = 1 \times 2^2 = 1$ $\frac{45}{2} - \frac{15}{2} = \frac{30}{2} = 15$	۴	۴
$-2f - \left(-\frac{90}{f}\right) = \frac{1}{f}$ $100 \div 100 = -2f + 100 \times \frac{1}{f} = 1$ $100 \div 100, \frac{1}{100} \rightarrow q = \frac{1}{f}$	۵	۵

$$a+id, a+qd, a+nd$$

$$\begin{matrix} \xrightarrow{\times q} & \xrightarrow{\times q} \end{matrix}$$

$$(a+qd)^r = (a+id)(a+nd)$$

$$a^r + 1 \frac{a+qd}{ida} = a^r + 1 \frac{a+nd}{ida}$$

$$1ed^r + 1ad = 0 \quad \Delta = f - 0 = f$$

$$d = \frac{1}{1e}$$

$$d = 0$$

$$\frac{-b \pm \sqrt{\Delta}}{2a} \rightarrow \frac{-r \pm \sqrt{f}}{r_0} = \frac{0}{1}$$

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$$a+id, a+id+a+vd \rightarrow ra+ra+na$$

$$(a+id)^r = (a+id)(a+vd) \quad \begin{matrix} \xrightarrow{\times r} & \xrightarrow{\times r} \end{matrix} \quad q = r$$

$$a^r + qad + qd^r = a^r + 1 \frac{a+vd}{rad} + vd^r$$

$$r d^r = rad \quad d^r = ad \quad a = d$$

$$\frac{1}{f} \left(\frac{r^{10} - 1}{r - 1} \right) \geq \frac{1}{f} \frac{10r^9}{1} = \frac{10r^9}{f}$$

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~~$$a+id, a+id+a+vd \rightarrow ra+ra+na$$~~

$$raq, raq^r, qq^r$$

~~$$a+id, a+id+a+vd \rightarrow ra+ra+na$$~~

$$b^r = a+c \rightarrow raq^r = raq + qq^r$$

~~$$a+id, a+id+a+vd \rightarrow ra+ra+na$$~~

~~$$a+id, a+id+a+vd \rightarrow ra+ra+na$$~~

$$rq = r + q^r$$

$$q^r - rq + r = 0$$

$$\Delta = b^2 - 4ac = 1 - 1 = 0 \quad \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-r \pm 0}{2} = -\frac{r}{2}$$

$$a_1 = \frac{0}{f}$$

$$a_1 = \frac{1}{f}$$

$$a_{1r} = -1$$

$$\frac{0}{f} - \frac{1}{f} = \frac{1}{f} + q \Rightarrow \frac{0}{f} - \frac{1}{f} = \frac{1}{f} + q \Rightarrow q = \frac{1}{f}$$

$$-1 + \pi, \frac{1}{f} + \pi, \pi + \frac{0}{f}$$

$$a_1$$

$$a_1 q$$

$$a_1 q^r$$

$$\pi + \frac{0}{f}$$

$$\pi q - \pi = \frac{0}{f} - \frac{1}{f}$$

$$\pi + \frac{1}{f} = (\pi - 1) q \rightarrow \pi q - q = \pi + \frac{1}{f} \rightarrow \pi q - \pi = \frac{1}{f} + q$$

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$$a, a+d, a+qd \rightarrow a^r + rad + d^r = a^r + rad + d^r$$

$$1d = vad$$

$$d = va$$

$$a+d+va+a+qva = v^r \rightarrow v^r a = v^r \quad a = 1$$

$$d = v$$

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