

تکلیف شماره ۱۱

کلاس، تاریخ

۲۰

$$1, 1 = (n-1)^2 + 1 \quad \text{آخری} = n^2$$

$$\text{مثال: } (9-1)^2 + 1 = 40$$

$$9^2 = 81$$

$$\text{مثال: } \frac{81+40}{2} = 110.5$$

$$1, \quad x \leftarrow 1, \quad x \leftarrow \sqrt{x} \Rightarrow \frac{x}{1} = x$$

$$2, \quad x \leftarrow 1, \quad 4x \leftarrow 4 \Rightarrow \frac{4x}{1} = 4x$$

$$3, \quad 4x \leftarrow 4, \quad 16x \leftarrow 16 \Rightarrow \frac{16x}{4} = 4x$$

$$4, \quad 16x \leftarrow 16, \quad 64x \leftarrow 64 \Rightarrow \frac{64x}{16} = 4x$$

$$x, 4x, 16x, 64x \rightarrow x=1$$

$$\text{مثال: } x \times x + x - 1 = x^2$$

$$x \times x + x - 1 = x^2$$

$$a_n = \begin{cases} x^k & n = k = 1, 2, 3, \dots \end{cases}$$

$$\begin{cases} x_{k+1} & n = k+1 = 1, 2, 3, \dots \end{cases}$$

$$\left[\frac{n}{k+1} \right] + a : n = k+1 = 1, 2, 3, \dots$$

$$n=1 \quad k=0 \quad a_1 = x \quad \left| \quad n=2 \quad k=0 \quad a_2 = \left[\frac{2}{1} \right] + a = 1+a$$

$$n=2 \quad k=1 \quad a_2 = 2 \quad \left| \quad n=3 \quad k=1 \quad a_3 = \left[\frac{3}{2} \right] + a = 1+a$$

$$n=3 \quad k=2 \quad a_3 = 3 \quad \left| \quad n=4 \quad k=2 \quad a_4 = \left[\frac{4}{3} \right] + a = 1+a$$

$$n=0 \quad k=0 \quad a_0 = 1 \quad (x=1)$$

$$n=1 \quad k=1 \quad a_1 = 2$$

$$a_0 + a_1 + \dots + a_9 = 10 + 1 = 11$$

$$n=2 \quad k=2 \quad a_2 = 3$$

$$a = -1$$

$$n=3 \quad k=3 \quad a_3 = 4$$

$$a_1 + a_2 + a_3 + \dots + a_9 = 11 + 1 = 12$$

$$x$$

$$-1$$

$$a_0 = 1F \quad a_U = 1U, F$$

(K)

$$a = \frac{1}{\sigma} \times (-1F) = -\frac{1}{\sigma} \quad a_0 = -\frac{1}{\sigma} \times 1F + \sigma b + c = 1F$$

$$\sigma b + c = 1F$$

$$\begin{array}{|l} \sigma b + c = 1F \\ \sigma b + c = 1F \end{array} \quad \textcircled{P} \checkmark \quad a_U = -\frac{1}{\sigma} \times 1F + \sigma b + c = 1U, F$$

$$\sigma b + c = 1F$$

$$\downarrow$$

$$b = 1 \quad b = F \quad c = 1$$

$$a_n = -\frac{1}{\sigma} n^r + F n - 1 \Rightarrow \frac{a_{10}}{a_1} = \frac{-\frac{1}{\sigma} \times 10^r + 10 \times F - 1}{-\frac{1}{\sigma} \times 1^r + 1 \times F - 1} = 0$$

$$a_F = 1F \quad a_n = 1U, \quad t_{10} = 0$$

$$a_F + t_{10} = 1F + 0 = 1F \Rightarrow t_{10} = 0 \quad \textcircled{P} \checkmark$$

$$t_{10} = t_{10} + \sigma d' = 0 + \sigma d' \quad \frac{t_{10}}{d} = \frac{\sigma d'}{d} = \frac{\sigma d}{d} = \textcircled{F}$$

$$a_{aF} = \sigma a_{aF} + t_{aF} \quad a_{aF} - t_{aF} = \sigma a_{aF} \quad (14)$$

$$t_{aF} (t_{aF} - a) = \sigma a_{aF} \quad (a_{aF} = a + t_{aF})$$

$$t_{aF} = \sigma a_{aF}$$

$$t(a, t_{aF}) = \sigma a_{aF} \quad t_{aF} = \sigma a_{aF}$$

$$a_{aF} = -t_{aF}$$

$$\frac{a_F}{d} = \frac{a_{10} + t_{10}}{d} = \frac{t_{10}}{F} = \textcircled{\frac{9}{F}}$$

$$\textcircled{P} \checkmark$$

$$a_{aF} = -t_{aF} \quad \frac{d}{d} = \textcircled{1}$$

$$(c, b, a \text{ گونجیڻیو}) \quad b = c + d \quad a = c + d$$

(1)

$$\frac{c}{f}, \frac{a}{f}, b \text{ گونجیڻیو} \quad \frac{a}{f} = \frac{c}{f} + q \quad b = \frac{c}{f} + q^r$$

$$c + d = \frac{cq^r}{f} \quad \frac{cq^r}{f} - c = d \quad \checkmark$$

$$c + d = \frac{c}{f} \times q \times r \quad c + d = \frac{cq}{r} \quad rd = \frac{cq}{r} - c$$

$$\frac{r(\frac{q}{r} - 1)}{r(\frac{q^r}{f} - 1)} = \frac{1}{\frac{q}{r} + 1} = r \quad q + r = 1 \quad (q = -1) \quad r = (-1)$$

$$(c, b, a \text{ گونجیڻیو}) \quad b, cq \quad a = q^r$$

(1)

$$(c, ra, rb \text{ گونجیڻیو}) \quad ra = c + d \quad rb = c + d$$

$$rcq = c + d \quad rcq - c = d \quad \frac{c(rq - 1)}{c(rq^r - 1)} = \frac{d}{d} = r \quad \checkmark \quad (r)$$

$$rq^r - r, rq - 1 \quad rq^r - rq - 1 = 0 \quad q = \frac{r \pm 0}{1} = \cancel{r}, \quad (-1/f)$$

$$\frac{aq}{aq} = q^r = \left(\frac{-1}{cf} \right)$$

$$\frac{aq}{aq} = q^r = -rf \quad \rightarrow r = -rf \quad \checkmark$$

$$\frac{a_u}{(a_r)^r} + \frac{a_r}{(a_u)^r} = r \quad \frac{a_0 q^0}{a_1^r q^r} + \frac{a_1 q}{a_1^r} = r \quad (9)$$

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$$\frac{q^r}{a_1^r} + \frac{q}{a_1} = r \quad \left(\frac{q}{a_1} + r\right) \left(\frac{q}{a_1} - 1\right) = 0$$

$$\frac{a_1^r}{a_r} = \frac{a_1^r}{a_1 q} = \frac{a_1}{q} = \left(1 \pm \frac{1}{r}\right)$$

(10)

$$a_r^r = a_r, \quad a_0 = rV \quad a_r^r = a_r q \quad a_r = q$$

$$\frac{a_0}{a_r^r} = \frac{rV}{a_r^r} = \frac{rV}{q} = q^r \quad q^r, rV \Rightarrow q, V$$

$$a_1 = \frac{a_0}{q^r} = \frac{rV}{q} = \frac{1}{V} \quad \frac{1}{r} - a_1 = \frac{1}{r} - \frac{1}{V} \quad \left(\frac{1}{q}\right)$$

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