

نمبر: $\frac{\square}{20}$

بنا خدا
دینا ادمی دم دخت

$$1 \quad \frac{x}{r} \cdot x \cdot xr = 92 \rightarrow x = f \quad \frac{f}{r} + f + fr = 21 \quad (1)$$

$$2 \quad \frac{f + fr + fr^2}{r} = 21 \rightarrow f + fr + fr^2 = 21r \Rightarrow fr^2 - 14r + f = 0$$

$$3 \quad (5) \rightarrow r^2 - 14r + 19 = 0 \rightarrow (r-19)(r-1) \Rightarrow r = \frac{1}{f} \Rightarrow \boxed{21}$$

$$r = f \Rightarrow \boxed{21}$$

$$4 \quad x^2 + f, 2x, x^2 - 2 \rightarrow fx^2 = fx^2 + x^f - 2x^2 - 1 \quad (2)$$

$$5 \quad x^f - 2x^2 - 1 = 0 \rightarrow x = \pm 2 \quad \text{حوّل صغف} \Rightarrow x = 2 \Rightarrow 1, 4, 2$$

$$x = \pm \sqrt{2} \Rightarrow r = \frac{1}{f}$$

$$6 \quad S_v = 1 \left(\frac{\frac{1}{f^v} - 1}{\frac{1}{f}} \right) = \frac{12v}{1}$$

$$7 \quad a + ar + ar^2 + ar^3 + ar^4 = p \quad (3)$$

$$8 \quad a(1 + r + r^2 + r^3 + r^4) = \frac{121}{11} \times 243 = \underline{293}$$

$$9 \quad d = \frac{b-a}{n+1} \Rightarrow \frac{43}{9} = 10, 5 \rightarrow 1, 11, 5, 22, \underline{32}, 5 \text{ و } - \text{ و } - \text{ و } 94 \quad (4)$$

$$10 \quad r^{n+1} = r^9 = 92 \rightarrow r = \pm 2 \Rightarrow B = \underline{1}$$

$$11 \quad A + B = 32, 5 + 1 = 33, 5 \quad \Leftarrow \quad B = \underline{-1}$$

$$12 \quad A + B = 32, 5 + (-1) = 31, 5$$

$$13 \quad -14, \frac{-95}{f}, \dots \rightarrow d = \frac{-95}{f} + 14 = \frac{-95 + 14f}{f} = \frac{1}{f} \quad (5)$$

$$14 \quad a_n = -14 + (n-1) \frac{1}{f} \rightarrow a_{11} = 1$$

$$15 \quad 121r^v = 1 \rightarrow r = \underline{r^{-1}}$$



Senobar

$$(a+rd)^r = (a+rd)(a+rd) = a^2 + r^2d^2 + 12ad = a^2 + 12ad + r^2d^2 \quad (6)$$

$$d(r^2d + 12a) = 0 \Rightarrow d = 0 \quad \times$$

$$d = -\frac{1}{12}ar$$

$$a+rd = a + \frac{-ra}{12} \Rightarrow \frac{11a}{12} = \frac{ra}{12}$$

$$a+rd = a + \frac{-ra}{12} = \frac{11a}{12} = \frac{ra}{12}$$

$$d = \frac{ra}{12} = \frac{1}{12} \quad \therefore d = 0$$

$$a = \frac{1}{12} = -\frac{11a}{12} \Rightarrow a = -11$$

$$(a+rd)^r = (a+rd)(a+rd) \rightarrow rd^2 - rad = 0 \quad (7)$$

$$d(rd - ra) = 0 \Rightarrow d = 0$$

$$d = a \Rightarrow a = \frac{1}{r} \Rightarrow d = \frac{1}{r}$$

$$r = \frac{1}{\frac{1}{r}} = r$$

$$a_{10} = \frac{1}{r} \times r^9 = r^9 = 121$$

$$a_{10} = \frac{1}{r}$$

$$rar, rar^r, ar^r \rightarrow far^r = rar + ar^r \Rightarrow far^r = ar(1+r^2) \quad (8)$$

$$fr = r+r^r \Rightarrow \frac{r^r - fr + r}{(r-1)(r-3)} \Rightarrow r=1 \quad \times \quad \leftarrow \text{غیر ثابت}$$

$$r=3$$

$$r, \frac{V}{r}, \dots \Rightarrow d = -\frac{1}{r} \quad a_n = r + (n-1)\left(-\frac{1}{r}\right)$$

(9)

$$r + \frac{-n}{r} + \frac{1}{r} = -\frac{n}{r} + \frac{1}{r}$$

$$a_r = a + rd \Rightarrow \frac{1}{r} + \frac{-r}{r} = \frac{0}{r}$$

$$a_n = a + nd \Rightarrow \frac{1}{r} + \frac{-V}{r} = \frac{1}{r}$$

$$a_{1r} = a + 1d \Rightarrow r + (-1) = -1$$

$$\left(\frac{1}{r} + x\right)^r = \left(\frac{0}{r} + x\right)(-1 + x) \Rightarrow \frac{1}{r} + x^r + \frac{1}{r}x = -\frac{0}{r} + \frac{0}{r}x - x$$

$$+x^r \Rightarrow x = -\frac{n}{r}$$

$$a + ar^r + ar^q = Vr \Rightarrow a(r^r + r^q + 1) = Vr$$

(10)

$$ar^r = a + d \Rightarrow a(r^r - 1) = d$$

$$a + qd = ar^q \Rightarrow a(r^q - 1) = qd \Rightarrow \frac{qd}{d} = r^q + 1 \Rightarrow$$

$$r^r = 1 \Rightarrow \boxed{r = 1}$$

$$a(1 + 1 + q^r) = Vr \Rightarrow Vr a = Vr \Rightarrow \boxed{a = 1}$$

$$1 + qd = q^r \Rightarrow qd = q^r \Rightarrow \underline{d = Vr}$$

